

Metabo DS 150 M

Metabo DS 150 M Bench Grinder Instruction Manual

Model: DS 150 M

1. INTRODUCTION

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your Metabo DS 150 M 6-Inch Shop Bench Grinder. Please read this manual thoroughly before operating the tool and retain it for future reference.

The Metabo DS 150 M is designed for sharpening, grinding, and deburring applications. It features a maintenance-free, low-noise, and low-vibration 120V single-phase induction motor, delivering a no-load speed of 3,600 RPM.



Figure 1.1: Metabo DS 150 M Bench Grinder, showing its compact design with two grinding wheels, eye shields, and steady rests.

2. SAFETY INSTRUCTIONS

Always adhere to general power tool safety guidelines and the specific instructions provided in this manual to prevent injury and damage to the tool.

2.1 General Safety Precautions

- Always wear appropriate personal protective equipment (PPE), including safety glasses or a face shield, hearing protection, and gloves.
- Ensure the work area is clean, well-lit, and free from obstructions.
- Do not operate the grinder in damp or wet conditions.
- Keep children and bystanders away from the operating area.
- Secure the workpiece firmly before grinding.
- Never force the tool; allow the grinding wheel to do the work.
- Disconnect the power supply before performing any adjustments, maintenance, or when changing grinding wheels.

2.2 Specific Grinder Safety

- Ensure adjustable eye shields and spark deflectors are properly positioned and secured before operation. These components are crucial for protecting against flying debris and sparks.
- Verify that the grinding wheels are correctly installed and free from cracks or damage. Replace damaged wheels immediately.

- Adjust the steady rests to be as close as possible to the grinding wheel without touching it, typically within 1/16 inch (1.5 mm), to prevent the workpiece from jamming.
- Do not grind on the side of the wheel unless the wheel is specifically designed for side grinding.
- Be aware that this product may expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

3. COMPONENTS AND PACKAGE CONTENTS

Your Metabo DS 150 M Bench Grinder package includes the following items:

- Metabo DS 150 M Bench Grinder unit
- (1) Vitrified Aluminum Oxide Grinding Wheel, Coarse (36 P)
- (1) Vitrified Aluminum Oxide Grinding Wheel, Fine (60 N)
- (2) Adjustable Eye Shields
- (2) Spark Deflectors
- (2) Adjustable Steady Rests
- Vibration-dampening rubber feet (pre-installed or to be attached)



Figure 3.1: Front view of the Metabo DS 150 M, highlighting the two grinding wheels and the power switch.

4. SETUP AND ASSEMBLY

Before connecting the grinder to power, ensure all components are correctly assembled and secured.

4.1 Mounting the Grinder

For stable operation, it is recommended to securely mount the bench grinder to a workbench using appropriate bolts and nuts (not included). The vibration-dampening rubber feet help reduce vibration during use.

4.2 Attaching Eye Shields and Spark Deflectors

1. Attach the spark deflectors to the grinder housing using the provided hardware. Ensure they are positioned to direct sparks away from the operator.
2. Mount the adjustable eye shields to the grinder, ensuring they can be pivoted to provide maximum protection without obstructing the view of the workpiece. Tighten the fasteners to hold them in place during operation.

4.3 Installing and Adjusting Steady Rests

1. Attach the steady rests to the grinder.
2. Adjust the position of each steady rest so that it is approximately 1/16 inch (1.5 mm) from the surface of its respective grinding wheel. This gap is critical to prevent workpieces from being caught between the rest and the wheel.
3. Ensure the steady rests are level with the center of the grinding wheel or slightly below, depending on the grinding task.
4. Tighten the steady rest fasteners securely before operation.

5. OPERATING INSTRUCTIONS

Follow these steps for safe and effective operation of your Metabo DS 150 M Bench Grinder.

5.1 Before Starting

- Confirm the grinder is securely mounted and all safety guards (eye shields, spark deflectors) and steady rests are properly adjusted.
- Inspect grinding wheels for any cracks, chips, or damage. Do not use damaged wheels.
- Ensure the power cord is in good condition and connected to a suitable 120V AC outlet.
- Wear all required PPE.

5.2 Grinding and Sharpening

1. Turn on the grinder using the power switch. Allow the wheels to reach full operating speed (3,600 RPM) before beginning work.
2. Gently bring the workpiece into contact with the grinding wheel, resting it on the steady rest. Apply light, consistent pressure.
3. Move the workpiece smoothly across the face of the wheel to ensure even wear and prevent grooving.
4. For sharpening, maintain the correct angle of the tool against the wheel.
5. Avoid overheating the workpiece by periodically dipping it in water (if applicable to the material) or allowing it to cool.
6. When finished, turn off the grinder and wait for the wheels to come to a complete stop before leaving the machine.



Figure 5.1: The Metabo DS 150 M in use, demonstrating the sharpening of a drill bit with sparks visible, emphasizing the importance of eye protection.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your bench grinder. Always disconnect the power supply before performing any maintenance.

6.1 Cleaning

- After each use, clean the grinder to remove dust and debris. Use a brush or compressed air.
- Wipe down external surfaces with a damp cloth. Do not use harsh chemicals or solvents.

6.2 Grinding Wheel Inspection and Replacement

- Periodically inspect grinding wheels for wear, cracks, or damage. Worn or damaged wheels must be replaced immediately.
- To replace a wheel, carefully remove the side cover, retaining nut, and flanges. Install the new wheel,

ensuring it is properly seated and the flanges and nut are tightened securely.

- Always use grinding wheels rated for the grinder's maximum RPM (3,600 RPM).

6.3 Motor Maintenance

The Metabo DS 150 M features a maintenance-free induction motor. No lubrication or internal servicing is required.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your bench grinder. For problems not listed here, contact Metabo customer support.

Problem	Possible Cause	Solution
Grinder does not start	No power supply; Faulty power switch; Motor issue	Check power outlet and circuit breaker; Ensure power cord is fully plugged in; Contact service center if switch or motor is suspected.
Excessive vibration	Loose mounting; Unbalanced grinding wheel; Damaged wheel	Tighten mounting bolts; Dress the grinding wheel to rebalance; Replace damaged wheel.
Grinding wheel not cutting effectively	Glazed or loaded wheel; Incorrect wheel for material	Dress the grinding wheel to expose fresh abrasive; Ensure appropriate wheel is used for the task.
Sparks are excessive or misdirected	Spark deflectors misaligned or damaged	Adjust or replace spark deflectors.

8. TECHNICAL SPECIFICATIONS

Feature	Specification
Model Number	DS 150 M
Brand	Metabo
Power Source	Corded Electric
Voltage	120 Volts (AC)
Wattage	370 watts
Amperage	3.4 Amp
Maximum Rotational Speed	3600 RPM (No-load)
Grinding Wheel Diameter	6 inches
Included Grinding Wheels	(1) Coarse 36 P, (1) Fine 60 N Vitrified Aluminum Oxide

Feature	Specification
Item Weight	20 Pounds
Product Dimensions (L x W x H)	14.6 x 10.1 x 9.5 inches
Material	Aluminum
Color	Green

9. WARRANTY AND SUPPORT

The Metabo DS 150 M Bench Grinder comes with a 3-Year Limited Warranty. Please refer to the warranty card included with your product for full terms and conditions.

For technical support, service, or to inquire about replacement parts, please visit the official Metabo website or contact their customer service department. You can also visit the [Metabo Store on Amazon](#) for more information.

9.1 Extended Protection Plans

Extended protection plans are available for purchase to provide additional coverage beyond the standard manufacturer's warranty. Options may include:

- 3-Year Protection Plan
- 4-Year Protection Plan
- Complete Protect (monthly subscription covering multiple eligible purchases)

Details regarding these plans, including pricing and coverage, can be found where the product was purchased or by contacting the plan provider.