

DEWALT DWE4002-B5

DEWALT DWE4002-B5 100mm 800W Angle Grinder Instruction Manual

MODEL: DWE4002-B5

1. Introduction

Thank you for choosing the DEWALT DWE4002-B5 100mm 800W Paddle Switch Angle Grinder. This powerful and versatile tool is designed for various grinding and cutting applications. Its compact design and ergonomic features ensure comfortable and efficient operation. Please read this manual thoroughly before operating the tool to ensure safe and effective use.

Key features of your DEWALT DWE4002-B5 Angle Grinder include:

- Small girth for comfortable gripping and superior ergonomics.
- Low profile gear case allowing access in confined areas.
- Abrasion protected motor for increased durability and extended tool life.

2. General Safety Instructions

WARNING: Read all safety warnings, instructions, illustrations, and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

2.1. Work Area Safety

- Keep the work area clean and well-lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2.2. Electrical Safety

- Power tool plugs must match the outlet. Never modify the plug in any way.

- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling, or unplugging the power tool. Keep cord away from heat, oil, sharp edges, or moving parts.

2.3. Personal Safety

- Always wear eye protection. Use safety glasses, goggles, or a face shield.
- Wear appropriate personal protective equipment (PPE) such as dust masks, non-skid safety shoes, hard hats, or hearing protection for appropriate conditions.
- Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source, picking up or carrying the tool.

2.4. Angle Grinder Specific Safety Warnings

- This power tool is intended to function as a grinder or cut-off tool. Read all safety warnings, instructions, illustrations, and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.
- Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.
- The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
- Always use the auxiliary handle. Loss of control can result in personal injury.
- Never place your hand near the rotating accessory. The accessory may kickback over your hand.
- Do not operate the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag clothing, pulling the accessory into your body.
- Regularly inspect the power cord for damage. If damaged, have it repaired by a qualified service agent.

3. Product Overview

Familiarize yourself with the components of your DEWALT DWE4002-B5 Angle Grinder before operation.



Figure 1: DEWALT DWE4002-B5 Angle Grinder. This image shows the complete angle grinder assembly, including the main body, paddle switch, side handle, and a grinding disc with its guard.

- **A. Paddle Switch:** For activating and deactivating the tool.
- **B. Side Handle:** Provides additional grip and control during operation.
- **C. Spindle Lock Button:** Used to lock the spindle for disc changes.
- **D. Wheel Guard:** Protects the user from sparks and debris.
- **E. Grinding Disc:** The abrasive accessory used for material removal.

4. Setup and Assembly

Ensure the tool is unplugged from the power source before performing any assembly or adjustments.

4.1. Attaching the Side Handle

1. The side handle (B) can be screwed into either side of the gear case, depending on user preference and application.
2. Tighten the handle securely by hand.

4.2. Adjusting the Wheel Guard

1. The wheel guard (D) is designed to protect against sparks and debris.
2. Loosen the guard clamping screw.
3. Rotate the guard to the desired position to deflect sparks away from you.
4. Tighten the clamping screw firmly to secure the guard.

4.3. Installing/Changing Grinding Discs

1. Press and hold the spindle lock button (C).
2. Using the supplied wrench, loosen and remove the outer flange nut.
3. Place the desired grinding disc (E) onto the inner flange, ensuring it sits flush.
4. Replace the outer flange nut and tighten it firmly with the wrench while holding the spindle lock button.
5. Ensure the disc is correctly seated and securely fastened before operation.

5. Operating Instructions

Always wear appropriate personal protective equipment, including eye protection, gloves, and hearing protection, when operating the angle grinder.



Figure 2: Proper two-hand grip for the DEWALT DWE4002-B5 Angle Grinder. The user is wearing protective gloves and holding the tool firmly with both hands, demonstrating safe handling.

5.1. Starting and Stopping the Tool

- **To Start:** Depress the paddle switch (A). The tool will start immediately.
- **To Stop:** Release the paddle switch (A). The tool will stop.

5.2. Grinding Techniques

- Hold the grinder firmly with both hands, ensuring a secure grip on the side handle.
- Allow the disc to reach full speed before contacting the workpiece.
- Apply light, even pressure. Excessive pressure can reduce efficiency, damage the disc, and overload the motor.
- Maintain a shallow angle (typically 15-30 degrees) between the disc and the workpiece for optimal grinding.
- Move the grinder smoothly across the surface to ensure even material removal and prevent gouging.
- For cutting operations, use a thin cut-off wheel and apply minimal pressure, allowing the disc to do the work.



Figure 3: DEWALT DWE4002-B5 Angle Grinder in operation. This image illustrates the grinder being used on a metal pipe, producing sparks, highlighting the need for proper PPE and work area safety.

6. Maintenance

Regular maintenance ensures the longevity and safe operation of your DEWALT Angle Grinder. Always disconnect the tool from the power supply before performing any maintenance.

- **Cleaning:** Keep the ventilation openings clear and free of dust. Use a soft brush or compressed air to clean the tool regularly. Do not use water or chemical cleaners.
- **Disc Inspection:** Before each use, inspect the grinding disc for cracks, chips, or excessive wear. Replace damaged or worn discs immediately.
- **Cord Inspection:** Check the power cord for any signs of damage, cuts, or fraying. If damaged, have it repaired by a qualified service technician.
- **Carbon Brushes:** The motor is equipped with carbon brushes. These wear down over time and should be inspected periodically. When they are worn, they should be replaced by a DEWALT authorized service center to maintain tool performance and warranty.
- **Storage:** Store the tool in a dry, secure location out of reach of children.

7. Troubleshooting

If you encounter issues with your angle grinder, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Tool does not start	No power supply; Faulty paddle switch; Worn carbon brushes	Check power outlet and cord; Ensure paddle switch is fully depressed; Have brushes inspected/replaced by service center.

Problem	Possible Cause	Solution
Excessive vibration	Damaged or improperly mounted disc; Loose side handle	Inspect and replace disc if damaged, ensure it's mounted correctly; Tighten side handle.
Overheating	Blocked ventilation slots; Excessive load; Continuous heavy use	Clean ventilation slots; Reduce pressure during operation; Allow tool to cool down.
Reduced performance	Worn grinding disc; Worn carbon brushes	Replace grinding disc; Have brushes inspected/replaced by service center.

If the problem persists after attempting these solutions, contact a DEWALT authorized service center for assistance.

8. Specifications

Model Number	DWE4002-B5
Power Input	800 Watts
Disc Diameter	100mm
Power Source Type	Corded Electric
Item Weight	1.26 Kilograms
Product Dimensions	12.8 x 36.8 x 15.4 cm
Material	Metal
Included Components	Angle Grinder (as described)

9. Warranty and Support

Your DEWALT DWE4002-B5 Angle Grinder comes with a **3-year warranty**, covering defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

For technical assistance, warranty service, or to locate an authorized service center, please visit the official DEWALT website or contact DEWALT customer support in your region. Always use genuine DEWALT replacement parts to ensure optimal performance and safety.

For more information, visit: www.dewalt.com