

Bosch GWS 6-100

Bosch GWS 6-100 Angle Grinder Instruction Manual

Model: GWS 6-100

1. SAFETY INSTRUCTIONS

Always observe basic safety precautions to reduce the risk of fire, electric shock, and personal injury when operating this power tool. Read all warnings and instructions before use.

1.1 General Power Tool Safety

- **Work Area Safety:** Keep your work area clean and well-lit. Cluttered or dark areas invite accidents.
- **Electrical Safety:** Do not expose power tools to rain or wet conditions. Avoid body contact with earthed or grounded surfaces.
- **Personal Safety:** Always wear eye protection. Use hearing protection when operating for extended periods. Dress properly; avoid loose clothing or jewelry.
- **Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.

1.2 Angle Grinder Specific Safety

- **Guard:** Always use the guard provided with the tool. Ensure it is securely attached and positioned for maximum safety.
- **Auxiliary Handle:** Always operate the grinder with the auxiliary handle firmly attached.
- **Disc Selection:** Use only discs that are correctly rated for the grinder's speed and intended application. Ensure the disc diameter matches the tool's specification (100 mm).
- **Kickback:** Be aware of potential kickback. Always maintain a firm grip on the tool and position your body to resist kickback forces.
- **Sparks:** Grinding produces sparks. Ensure no flammable materials are in the vicinity.

2. PRODUCT OVERVIEW

The Bosch GWS 6-100 is a robust 4-inch angle grinder designed for various grinding and cutting tasks in metalworking. Familiarize yourself with its components before operation.



This image shows the Bosch GWS 6-100 Angle Grinder. It features a blue main body with the Bosch logo and 'GWS 6-100 Professional' text. The front part is silver-grey, housing the spindle lock button and a black auxiliary handle. A grinding disc is attached to the spindle, protected by a silver-grey guard. The power cord extends from the rear of the tool.

2.1 Key Components

1. **Spindle Lock Button:** Used to lock the spindle for disc changes.
2. **Auxiliary Handle:** Provides additional grip and control. Can be mounted on either side.
3. **Protective Guard:** Shields the user from sparks and debris. Adjustable.
4. **On/Off Switch:** Controls power to the motor.
5. **Grinding Disc:** The abrasive accessory for material removal.
6. **Power Cord:** Connects the tool to the electrical supply.

3. SETUP

Proper setup ensures safe and efficient operation of your angle grinder.

3.1 Attaching the Auxiliary Handle

- Screw the auxiliary handle firmly into one of the threaded holes on either side of the gear head.
- Ensure it is tightened securely before operation.

3.2 Adjusting the Protective Guard

- Loosen the clamping screw on the guard.
- Rotate the guard to a position that offers maximum protection for the specific task.
- Tighten the clamping screw firmly to secure the guard.

3.3 Mounting the Grinding Disc

1. Ensure the tool is unplugged from the power source.
2. Press and hold the spindle lock button.
3. Unscrew the clamping nut using the provided spanner.
4. Place the backing flange onto the spindle.
5. Position the grinding disc onto the backing flange, ensuring it sits correctly.

6. Screw on the clamping nut and tighten it firmly with the spanner while holding the spindle lock button.
7. Release the spindle lock button.

4. OPERATING INSTRUCTIONS

Follow these steps for safe and effective operation of your Bosch GWS 6-100 Angle Grinder.

4.1 Switching On/Off

- **To Switch On:** Push the on/off switch forward. For continuous operation, push it further forward until it locks.
- **To Switch Off:** For continuous operation, press the rear part of the on/off switch. For non-continuous operation, release the switch.

4.2 Holding the Tool

- Always hold the angle grinder firmly with both hands: one hand on the main handle and the other on the auxiliary handle.
- Ensure a stable stance and balance.

4.3 Grinding and Cutting Techniques

- **Grinding:** Apply moderate pressure. Move the tool evenly over the workpiece. Avoid excessive pressure, which can overheat the tool and disc.
- **Cutting:** For cutting, use a cutting disc. Guide the tool with uniform feed, avoiding tilting or excessive pressure on the disc. Do not use grinding discs for cutting.
- Allow the disc to reach full speed before contacting the workpiece.

5. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your angle grinder.

- **Cleaning:** Keep the ventilation slots clean to prevent motor overheating. Regularly clean the tool housing with a soft, damp cloth. Do not use solvents.
- **Disc Replacement:** Replace worn or damaged grinding/cutting discs immediately. Refer to section 3.3 for mounting instructions.
- **Carbon Brushes:** The carbon brushes may require periodic inspection and replacement by a qualified service technician. Do not attempt to replace them yourself unless specifically instructed in a detailed service manual.
- **Storage:** Store the tool in a dry, secure place out of reach of children when not in use.

6. TROUBLESHOOTING

If you encounter issues with your Bosch GWS 6-100, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
Tool does not start	No power supply; faulty switch; worn carbon brushes	Check power connection; ensure switch is fully engaged; have carbon brushes checked by service.

Problem	Possible Cause	Solution
Excessive vibration	Damaged or improperly mounted disc; loose auxiliary handle	Replace disc; ensure disc is correctly mounted; tighten auxiliary handle.
Poor grinding performance	Worn disc; incorrect disc for material	Replace disc; ensure appropriate disc type is used.
Tool overheats	Blocked ventilation slots; excessive load	Clean ventilation slots; reduce pressure during operation; allow tool to cool.

If problems persist, contact an authorized Bosch service center.

7. SPECIFICATIONS

Key technical data for the Bosch GWS 6-100 Angle Grinder:

- **Model:** GWS 6-100
- **Power Input:** 670 Watts
- **No Load Speed:** 11000 RPM
- **Disc Diameter:** 100 mm (4 inches)
- **Grinding Spindle Thread:** M 10
- **Power Source:** Corded Electric
- **Material:** Alloy Steel
- **Item Weight:** 2.22 kg
- **Product Dimensions (LxWxH):** 31 x 12 x 9 cm
- **Country of Origin:** India

8. WARRANTY AND SUPPORT

Bosch power tools are manufactured to high-quality standards. This product is covered by a manufacturer's warranty against defects in materials and workmanship under normal use.

- **Warranty Period:** Refer to your purchase documentation or the official Bosch website for specific warranty terms and duration applicable in your region.
- **Claiming Warranty:** In case of a warranty claim, please retain your proof of purchase. Do not attempt to repair the tool yourself, as this may void the warranty.
- **Customer Support:** For technical assistance, service, or spare parts, please contact your local authorized Bosch service center or visit the official Bosch website for contact information.