

Bosch CMW300

BOSCH CMW300 3-Inch Carbide Multi-Wheel Instruction Manual

Model: CMW300

1. PRODUCT OVERVIEW

The Bosch CMW300 3-inch Carbide Multi-Wheel is an accessory designed to expand the cutting capabilities of 3-inch angle grinders. This multi-wheel enables cutting of various materials that traditional abrasive wheels may not handle effectively, including wood, plastics, composites, wood with nails, drywall, and laminates.

Key features include:

- **Carbide-Grit Edge:** Ensures extended life and durability, with the grit bonded to the steel wheel using laser-melting technology for a strong connection.
- **Thin Wheel Body:** Facilitates fast and precise cuts, particularly in hard-to-reach areas.
- **Versatile Material Compatibility:** Suitable for cutting wood, wood with nails, plastic, plaster, and other composite materials.
- **Optimal Compatibility:** Designed to integrate seamlessly with the Bosch GWS12V-30 3-inch grinder and compatible with standard 3-inch grinders and cut saws featuring 3/8-inch arbors.



Figure 1: Bosch CMW300 Carbide Multi-Wheel in its packaging, showing product details and specifications.

2. SAFETY INSTRUCTIONS

Always adhere to general power tool safety guidelines and the specific instructions provided with your angle grinder. Failure to follow these instructions may result in electric shock, fire, and/or serious injury.

- **Personal Protective Equipment:** Always wear appropriate personal protective equipment, including safety glasses or goggles, hearing protection, and heavy-duty gloves. A dust mask is recommended when cutting materials that produce fine particles.
- **Tool Compatibility:** Ensure the CMW300 multi-wheel is compatible with your angle grinder's arbor size (3/8 inch) and maximum RPM rating (Max RPM 20,000/min). Never exceed the maximum RPM specified on the wheel.
- **Secure Workpiece:** Always secure the workpiece firmly to prevent movement during cutting. Use clamps or a vise.
- **Inspect Wheel:** Before each use, inspect the multi-wheel for any signs of damage, cracks, or excessive wear. Do not use a damaged wheel.
- **Proper Mounting:** Ensure the wheel is correctly and securely mounted on the angle grinder's arbor, following the grinder's instructions.

- **Maintain Control:** Always maintain a firm grip on the angle grinder and be aware of kickback potential.
- **Ventilation:** Work in a well-ventilated area, especially when cutting materials that produce dust or fumes.
- **Material Suitability:** Use the multi-wheel only for the materials it is designed to cut (wood, plastic, plaster, wood with nails, composites). Do not use it for cutting metal unless explicitly stated by Bosch for this specific wheel.

3. SETUP

Proper installation of the CMW300 multi-wheel is crucial for safe and effective operation.

1. **Disconnect Power:** Ensure your angle grinder is unplugged or its battery is removed before attempting to install or remove any accessories.
2. **Clean Arbor and Flanges:** Clean the grinder's arbor and mounting flanges to remove any debris that could prevent proper seating of the wheel.
3. **Position Wheel:** Place the CMW300 multi-wheel onto the grinder's arbor, ensuring it sits flush against the inner flange. The wheel is designed for a 3/8-inch arbor.
4. **Attach Outer Flange and Nut:** Secure the outer flange and tighten the arbor nut using the appropriate wrench provided with your angle grinder. Ensure the wheel is firmly secured and does not wobble. Do not overtighten.
5. **Check Guard:** Verify that the grinder's safety guard is properly positioned and secured to provide maximum protection during operation.

4. OPERATING INSTRUCTIONS

Follow these guidelines for effective and safe cutting with the Bosch CMW300 multi-wheel.

1. **Pre-Operation Check:** Before starting, ensure all safety precautions are met, the workpiece is secure, and the wheel is properly installed.
2. **Starting the Cut:** Allow the angle grinder to reach full speed before making contact with the workpiece.
3. **Cutting Technique:** Apply steady, moderate pressure. Do not force the wheel through the material. Let the wheel's carbide grit do the work. For optimal results, use a controlled, consistent feed rate.
4. **Material Specifics:**
 - *Wood and Wood with Nails:* The multi-wheel is effective for cutting various types of wood, including those containing nails. Be aware of potential kickback if the wheel binds on a nail.
 - *Plastics and Composites:* Cut at a steady pace to avoid melting or excessive heat buildup, which can deform the material or clog the wheel.
 - *Plaster and Drywall:* These materials will produce significant dust. Ensure adequate ventilation and wear a dust mask.
5. **Hard-to-Reach Areas:** The thin body of the CMW300 is designed for precision and accessing confined spaces. Exercise extra caution and maintain full control of the tool in such situations.
6. **Finishing the Cut:** Once the cut is complete, allow the wheel to stop spinning before setting the grinder down.

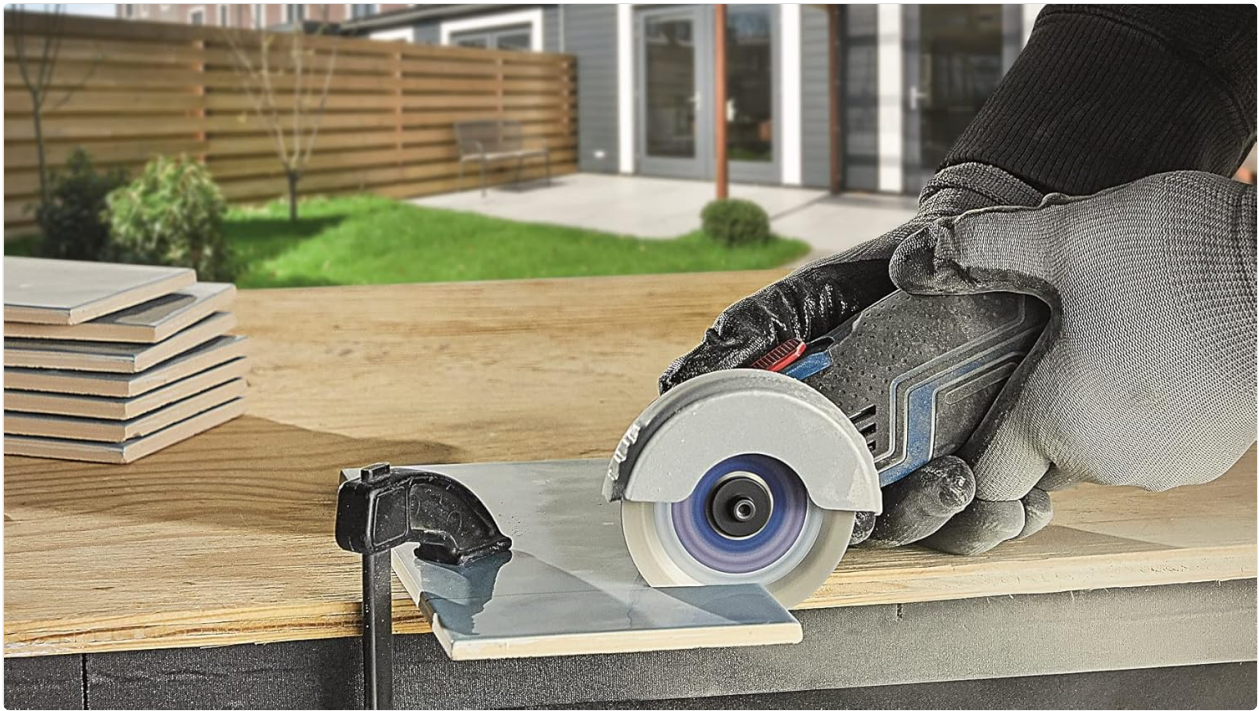


Figure 2: The Bosch CMW300 multi-wheel being used with an angle grinder to cut a ceramic tile, demonstrating its versatility.

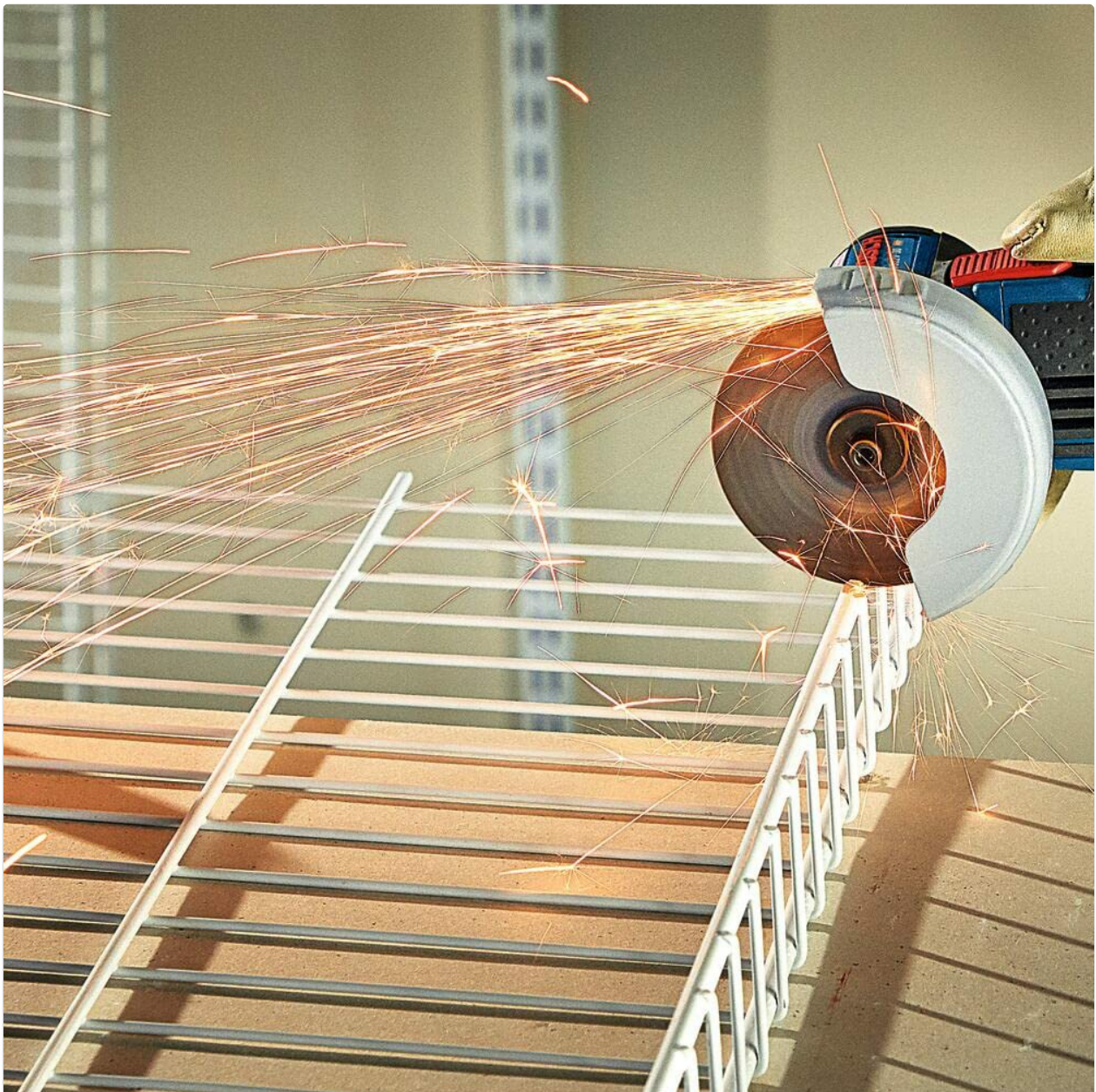


Figure 3: The multi-wheel cutting through metal grating, illustrating its capability for various materials and the sparks generated during such operations.



Figure 4: A detailed view of the Bosch CMW300 multi-wheel precisely cutting a threaded rod, highlighting its cutting efficiency.



Figure 5: The Bosch CMW300 multi-wheel in action, cutting a PVC pipe, demonstrating its clean and efficient performance on plastic materials.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your CMW300 multi-wheel.

- **Cleaning:** After each use, clean the multi-wheel to remove any accumulated dust, debris, or material residue. A stiff brush or compressed air can be used. Ensure the wheel is dry before storage.
- **Inspection:** Periodically inspect the carbide-grit edge for signs of wear, chipping, or damage. A worn wheel will lose its cutting efficiency and may become unsafe. Replace the wheel if any damage is observed.
- **Storage:** Store the multi-wheel in a dry, cool place, away from direct sunlight and moisture. Keep it in its original packaging or a protective container to prevent damage to the cutting edge.
- **Disposal:** Dispose of worn or damaged wheels according to local regulations for metal or abrasive waste.

6. TROUBLESHOOTING

If you encounter issues while using the CMW300 multi-wheel, consider the following:

- **Poor Cutting Performance:** If the wheel is not cutting efficiently, it may be worn out or clogged with material. Inspect the carbide grit for wear and clean the wheel if necessary. Ensure you are not applying excessive pressure, which can reduce cutting speed.
- **Excessive Vibration:** Vibration can indicate improper mounting, a damaged wheel, or an unbalanced wheel. Disconnect power, remove the wheel, and re-install it carefully. Inspect the wheel for damage. If vibration persists, replace the wheel.
- **Overheating:** If the wheel or workpiece is overheating, you might be applying too much pressure or cutting too quickly. Reduce the feed rate and allow the wheel to cool. Ensure the material is suitable for this type of wheel.
- **Kickback:** Kickback usually occurs when the wheel binds or gets pinched in the workpiece. Always maintain a firm grip on the grinder, secure the workpiece, and avoid cutting at awkward angles.

7. SPECIFICATIONS

Specification	Detail
Manufacturer	Bosch
Item Model Number	CMW300
Product Dimensions	7.62 x 7.62 x 0.1 cm (3 x 3 x 0.04 inches)
Weight	41 g
Grit Material	Tungsten Carbide
Grit Type	Medium
Grit Number	120
Construction Type	Super-Abrasive
Compatible Devices	Angle Grinder (3-inch with 3/8-inch arbor)
Compatible Disc Grinder Tool Models	BOSCH GWX18V-8N (and others with 3/8-inch arbor)
Recommended Product Uses	Cutting (Wood, Wood with Nails, Plastic, Plaster)
Maximum RPM	20,000/min
UPC	000346662931

8. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation included with your purchase or visit the official Bosch website. Bosch provides customer support and service for their products. For technical assistance, spare parts, or service inquiries, please contact Bosch customer service directly through their official channels.

