

Bosch GWX27LM450

BOSCH GWX27LM450 X-LOCK Metal Grinding Abrasive Wheel Instruction Manual

1. INTRODUCTION

This manual provides essential information for the safe and effective use of the BOSCH GWX27LM450 4-1/2 In. x 1/4 In. X-LOCK Metal Grinding Abrasive Wheel. This wheel is designed for metal grinding applications and features the innovative X-LOCK mounting system for quick and tool-free changes.

2. SAFETY INFORMATION

WARNING: Always follow all safety precautions to prevent serious injury or property damage.

- Adhere to all applicable OSHA and ANSI B7.1 safety standards.
- Do not mount the abrasive wheel on the grinder if any debris is present in the X-LOCK locking mechanism.
- Ensure the grinder's RPM (Revolutions Per Minute) does not exceed the maximum RPM rating of the abrasive wheel. The maximum rotational speed for this wheel is 13280 RPM.
- Always adjust the guard for maximum operator protection before use.
- Run the wheel for one minute before initial use to ensure stability and proper function.
- Avoid jamming, twisting, or pinching the wheel in the workpiece. Do not apply excessive side pressure to the wheel, as this can cause kickback.
- Do not use the wheel near flammable materials or gases.
- Protect the wheel from moisture.
- Discard the wheel immediately if it is dropped or damaged.



Figure 1: BOSCH GWX27LM450 X-LOCK Metal Grinding Abrasive Wheel, showing product details and safety markings.

3. PRODUCT OVERVIEW: X-LOCK SYSTEM

The Bosch X-LOCK system revolutionizes abrasive wheel changes by providing a tool-free, snap-on mounting and lever-release mechanism. This design eliminates the need for spanner wrenches or flange nuts, significantly speeding up accessory changes.

3.1 Key Features

- **X-LOCK Mount Design:** Offers a faster, fixed mount for secure attachment.
- **Tool-Free Disc Swap:** Wheels mount properly with an audible snap and are released with a pull of a lever, eliminating loose parts.
- **Backward Compatibility:** Bosch X-LOCK abrasive wheels are compatible with standard 7/8 In. arbor mounts, providing versatility.
- **High-Quality Material:** Made with Aluminum Oxide grit and resinoid bonds for exceptional speed and durability in tough grinding applications.



Figure 2: Illustration of the X-LOCK system's snap-in mounting and single-lever release for quick accessory changes.



Figure 3: The X-LOCK system allows for significantly faster wheel changes compared to standard 7/8 In. arbor mounts.

4. SETUP

4.1 Mounting the Abrasive Wheel

1. Ensure your angle grinder is unplugged or its battery is removed.
2. Inspect the X-LOCK mechanism on both the grinder and the wheel for any debris. Clean if necessary.
3. Align the X-LOCK interface on the abrasive wheel with the X-LOCK spindle on the grinder.
4. Press the wheel firmly onto the spindle until you hear an audible 'snap', indicating it is securely locked in place. Gently tug on the wheel to confirm it is properly seated.

5. Adjust the grinder's guard to ensure maximum protection for your specific application.

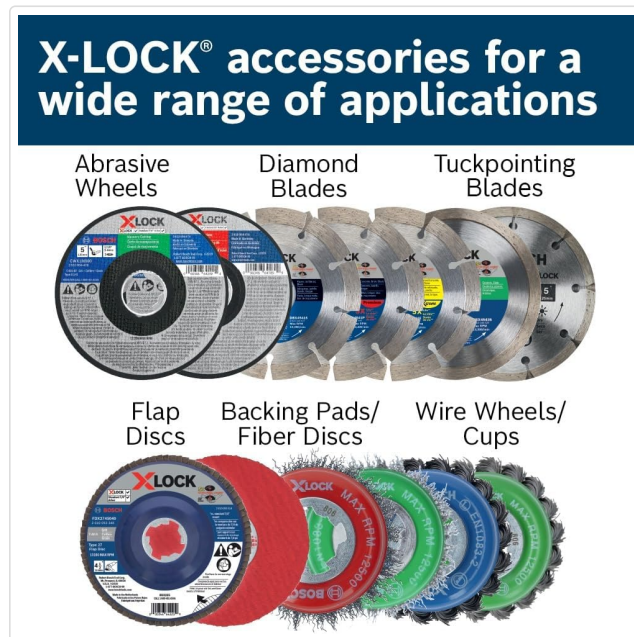


Figure 4: Demonstrating the snap-on mounting of an X-LOCK abrasive wheel onto an angle grinder.

4.2 Compatibility with Standard Grinders

While designed for X-LOCK grinders, these wheels are also backward compatible with standard 7/8 In. arbor mounts. This allows for flexible use across various angle grinders.



Figure 5: X-LOCK wheels can be used with standard 7/8 In. arbor grinders, offering broad compatibility.

5. OPERATING INSTRUCTIONS

5.1 General Grinding Applications

The GWX27LM450 wheel is specifically designed for fast material removal in metal grinding applications. Its 30-grit Aluminum Oxide composition ensures efficient and durable performance.

- Always wear appropriate personal protective equipment (PPE), including eye protection, gloves, and hearing protection.

- Secure the workpiece firmly to prevent movement during grinding.
- Start the grinder and allow the wheel to reach full operating speed before making contact with the workpiece.
- Apply steady, moderate pressure. Avoid excessive force, which can damage the wheel or cause kickback.
- Maintain a consistent angle for optimal material removal and finish.



Figure 6: Proper technique for using the X-LOCK metal grinding wheel on a workpiece.

5.2 Releasing the Abrasive Wheel

To change the wheel, simply pull the lever on the grinder. This releases the X-LOCK mechanism, allowing for quick and easy removal of the wheel.

1. Ensure the grinder is turned off and the wheel has come to a complete stop.
2. Locate the wheel-release lever on the grinder.
3. Pull the lever to disengage the X-LOCK mechanism.
4. Remove the abrasive wheel.

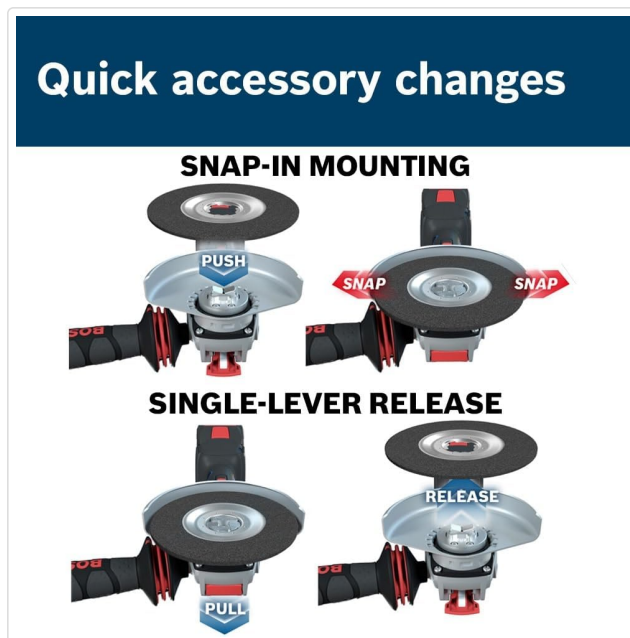


Figure 7: The single-lever release mechanism simplifies wheel removal.

5.3 X-LOCK Application Video

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Video 1: This video demonstrates various applications of the BOSCH X-LOCK system, including grinding and cutting tasks on different materials.

6. MAINTENANCE

Proper maintenance extends the life of your abrasive wheel and ensures safe operation.

- **Inspection:** Before each use, visually inspect the wheel for cracks, chips, or any signs of damage. Never use a damaged wheel.
- **Storage:** Store abrasive wheels in a dry, cool place, away from direct sunlight and moisture. Protect them from impacts that could cause damage.
- **Cleaning:** Keep the X-LOCK interface on the wheel and grinder clean and free of debris to ensure proper mounting.

7. TROUBLESHOOTING

If you encounter issues with your abrasive wheel, consider the following:

- **Wheel Not Mounting Securely:** Ensure the X-LOCK mechanism on both the wheel and grinder is clean and free of debris. Apply firm, even pressure until an audible 'snap' is heard.
- **Excessive Vibration:** Check if the wheel is properly mounted and not damaged. Ensure the grinder's guard is correctly positioned.
- **Poor Grinding Performance:** The wheel may be worn or unsuitable for the material. Ensure the wheel's grit and type match the application.
- **Wheel Damage:** If the wheel is chipped, cracked, or dropped, discard it immediately and replace it with a new one.

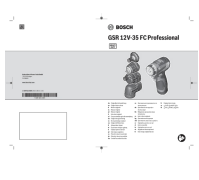

8. SPECIFICATIONS


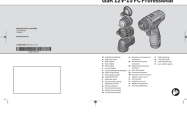


Attribute	Value
Brand	Bosch
Model Number	GWX27LM450
Part Number	GWX27LM450
Size	4-1/2 In.
Product Dimensions	0.46"L x 4.51"W
Cutting Diameter	4.5 Inches
Grit Material	Aluminum Oxide
Grit Type	Extra Coarse
Grit Number	30
Construction Type	Bonded, Grinding
Maximum Rotational Speed	13280 RPM
Recommended Uses	Grinding
Compatible Devices	Angle Grinder
Item Weight	5.4 ounces
Item Package Quantity	1
UPC	000346641936

9. WARRANTY AND SUPPORT

For warranty information, product support, or to inquire about other Bosch products, please visit the official Bosch website or contact Bosch customer service. Keep your purchase receipt as proof of purchase. You can find more information and contact details on the [BOSCH Store on Amazon](#).

Related Documents - GWX27LM450

	<p>Bosch GSR 12V-35 FC Professional Bedienungsanleitung</p> <p>Umfassende Bedienungsanleitung für den Bosch GSR 12V-35 FC Professional Akku-Bohrschrauber, einschließlich Sicherheitshinweisen, Produktmerkmalen, technischen Daten und Bedienungsrichtlinien.</p>
	<p>Bosch GCD 12 JL Professional Metal Cutting Saw User Manual and Safety Instructions</p> <p>Comprehensive user manual and safety instructions for the Bosch GCD 12 JL Professional metal cutting saw. Includes operating procedures, maintenance, and safety warnings in multiple languages.</p>

	<p>Bosch GWS11-450P Angle Grinder: Operating and Safety Instructions</p> <p>Comprehensive operating and safety instructions for the Bosch GWS11-450P angle grinder, covering safe usage, assembly, specifications, and maintenance for professional applications.</p>
	<p>Bosch GSR 12V-15 FC Professional Cordless Drill Driver Operating Manual</p> <p>Comprehensive operating manual for the Bosch GSR 12V-15 FC Professional cordless drill driver. Includes safety guidelines, product overview, technical specifications, operational instructions, and maintenance advice.</p>
	<p>Bosch GCO 14-24 Professional Metal Cut-Off Saw User Manual</p> <p>User manual for the Bosch GCO 14-24 Professional metal cut-off saw. Provides comprehensive safety instructions, operational guidelines, technical specifications, and maintenance advice for professional metal cutting tasks.</p>
	<p>Bosch Ignition Coils: Application Guide & Features</p> <p>Discover Bosch ignition coils, including the advanced Transformer Ignition Coil. This guide details features, benefits, and comprehensive application data for a wide range of vehicles, serving both OE and aftermarket needs.</p>