

## Dremel 1453

# Dremel 1453 Chainsaw Sharpening Kit

Rotary Tool Accessory Set with Sharpening Angle Guide Attachment and Grinding Stones

## INTRODUCTION

The Dremel 1453 Chainsaw Sharpening Kit is designed to restore the sharpness of dull chainsaw chains quickly and efficiently using your Dremel rotary tool. This kit provides a convenient and effective method for maintaining your chainsaw's cutting performance, extending its lifespan, and ensuring safe operation.

It includes an angle guide attachment and a selection of grinding stones to accommodate various chainsaw chain sizes, making the sharpening process more precise and less labor-intensive than traditional methods.

## SAFETY INFORMATION

Always prioritize safety when operating power tools and sharpening equipment. Failure to follow safety instructions can result in serious injury.

- **Read the Dremel Rotary Tool Manual:** Before using this attachment, thoroughly read and understand the instruction manual for your specific Dremel rotary tool.
- **Wear Personal Protective Equipment (PPE):** Always wear safety glasses or goggles, hearing protection, and gloves when operating the Dremel tool and sharpening the chainsaw.
- **Secure the Chainsaw:** Ensure the chainsaw is stable and securely clamped or positioned to prevent movement during sharpening. Disconnect the spark plug wire or remove the battery to prevent accidental starting.
- **Inspect Grinding Stones:** Before each use, inspect the grinding stones for cracks, chips, or excessive wear. Replace damaged stones immediately.
- **Maintain Proper Ventilation:** Work in a well-ventilated area to avoid inhaling dust particles generated during sharpening.
- **Keep Work Area Clean:** Ensure your work area is clean, well-lit, and free of clutter to prevent accidents.
- **Unplug Before Adjustments:** Always unplug the Dremel tool from the power source before changing accessories, making adjustments, or performing maintenance.

## PACKAGE CONTENTS

The Dremel 1453 Chainsaw Sharpening Kit includes the following components:

- 1x Sharpening Angle Guide Attachment
- 1x Adjustment Gauge
- 4x Chainsaw Sharpening Grinding Stones (4.0 mm (453), 4.5 mm (457), 4.8 mm (454), and 5.6 mm (455))
- 1x Key (for Dremel tool collet)



Figure 1: All components of the Dremel 1453 Chainsaw Sharpening Kit, including the angle guide, adjustment gauge, four grinding stones of different sizes, and a key.

## SETUP

1. **Prepare Your Dremel Tool:** Ensure your Dremel rotary tool is unplugged. Loosen the collet nut and remove any existing accessory.
2. **Select the Correct Grinding Stone:** Choose one of the four included grinding stones (4.0 mm, 4.5 mm, 4.8 mm, or 5.6 mm) that matches the size of your chainsaw chain's cutting teeth. Refer to your chainsaw's manual for the correct file size.
3. **Insert Grinding Stone:** Insert the selected grinding stone into the Dremel tool's collet. Tighten the collet nut securely using the provided key.
4. **Attach Sharpening Angle Guide:** Screw the sharpening angle guide attachment onto the threaded collar of your Dremel rotary tool. Ensure it is firmly attached and aligned.
5. **Adjust Grinding Depth:** Use the adjustment gauge to set the correct grinding depth. The grinding depth should be up to 30 mm. This ensures that only the cutting edge is sharpened without removing too much material from the depth gauge.



Figure 2: The Dremel rotary tool with the sharpening attachment correctly installed and positioned on a chainsaw chain, ready for sharpening.

## OPERATING INSTRUCTIONS

Follow these steps to effectively sharpen your chainsaw chain:

1. **Secure the Chainsaw:** Place the chainsaw on a stable surface. Engage the chain brake and ensure the chain cannot move freely.
2. **Identify Sharpening Angle:** The sharpening angle guide is designed to help maintain the correct 30-degree sharpening angle for most chainsaw chains. Align the guide with the cutting tooth.
3. **Begin Sharpening:** Turn on your Dremel tool. Gently bring the rotating grinding stone into contact with the cutting edge of the chainsaw tooth. Apply light, consistent pressure.
4. **Sharpen Each Tooth:** Sharpen each tooth on one side of the chain, moving from one tooth to the next. Ensure you make the same number of passes on each tooth to maintain consistent length and angle.
5. **Flip Chainsaw/Chain:** Once all teeth on one side are sharpened, flip the chainsaw or reposition the chain to sharpen the teeth facing the opposite direction.
6. **Check Sharpness:** After sharpening, check the sharpness of the teeth. A properly sharpened tooth will have a sharp, clean edge with no burrs.



Figure 3: A close-up view demonstrating the Dremel tool with the sharpening attachment precisely grinding a chainsaw

tooth, ensuring the correct angle and depth.

## MAINTENANCE

Proper maintenance of your Dremel 1453 Chainsaw Sharpening Kit will ensure its longevity and continued performance:

- **Clean After Use:** After each sharpening session, remove the grinding stone and attachment from the Dremel tool. Use a brush or compressed air to remove any dust and debris from all components.
- **Inspect Grinding Stones:** Regularly inspect the grinding stones for wear. As they wear down, their effectiveness decreases. Replace them when they become too small or lose their abrasive quality.
- **Store Properly:** Store the sharpening kit components in a dry, clean place, preferably in their original packaging or a dedicated storage case, to protect them from damage and corrosion.
- **Check Attachment for Wear:** Periodically inspect the angle guide attachment for any signs of damage or wear that could affect its accuracy.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Chainsaw chain not sharpening effectively.	Incorrect grinding stone size; Worn grinding stone; Incorrect sharpening angle; Insufficient pressure.	Ensure the grinding stone matches the chain tooth size. Replace worn stones. Verify the 30-degree angle using the guide. Apply consistent, light pressure.
Excessive sparks or smoke during sharpening.	Too much pressure; Dull grinding stone.	Reduce pressure. Replace the grinding stone if it's dull.
Dremel tool overheating.	Prolonged use; Blocked vents.	Allow the tool to cool down. Ensure vents are clear of debris. Avoid continuous heavy use.

## SPECIFICATIONS

- **Model Number:** 1453
- **Manufacturer:** Dremel
- **Part Number:** 26151453JB
- **Item Weight:** 0.81 ounces
- **Product Dimensions:** 5.91 x 3.54 x 1.57 inches
- **Included Grinding Stone Sizes:** 4.0 mm (453), 4.5 mm (457), 4.8 mm (454), 5.6 mm (455)
- **Grinding Depth:** Up to 30 mm
- **Color:** Grey
- **Date First Available:** January 13, 2021





## WARRANTY AND SUPPORT



For warranty information, technical support, or to purchase replacement parts, please visit the official Dremel website or contact Dremel customer service. Keep your purchase receipt as proof of purchase.

Refer to your Dremel rotary tool's specific manual for additional support and compatibility details.

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Related Documents - 1453

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