

Oregon 520-120

Oregon Professional 520-120 Bench Grinder Universal Saw Chain Sharpener User Manual

1. INTRODUCTION

The Oregon Professional 520-120 Bench Grinder is designed for professional users requiring frequent, high-volume chain sharpening. This reliable bench grinder combines precision results with quality, ensuring your chainsaw chains remain sharp and efficient. It is ideal for all chain types, sharpening up to 0.404-inch pitch chains from various manufacturers including Oregon, Stihl, and Husqvarna.

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your Oregon 520-120 Bench Grinder.

2. KEY FEATURES

- **Professional Grinder:** Designed for frequent, high-volume chain sharpening, suitable for both bench or wall mounting.
- **Time and Cost Savings:** Enables self-sharpening of chainsaw chains, reducing reliance on external services.
- **Universal Compatibility:** Sharpens chains up to 0.404-inch pitch from various manufacturers.
- **Accurate Sharpening:** Features multiple adjustment points for precise sharpening angles and an integrated light for improved visibility.
- **Included Accessories:** Comes with a dressing brick, profile guide, operator instructions, two grinding wheels (3.2mm & 4.7mm), and a 6.0mm flat profile disc for depth gauge maintenance.

3. SETUP

The Oregon 520-120 Bench Grinder can be mounted to a workbench or wall using the two included bolts. Ensure the mounting surface is stable and secure to prevent movement during operation.

3.1 Mounting the Grinder

1. Select a sturdy workbench or wall location that provides adequate space for operation and chain handling.
2. Use the grinder's base as a template to mark the drilling points for the mounting bolts.

3. Drill appropriate pilot holes for the mounting bolts.
4. Securely fasten the grinder to the surface using the provided bolts.

3.2 Installing Grinding Wheels

The grinder includes three grinding wheels for different chain types and depth gauge maintenance. Select the appropriate wheel for your chain pitch.

- 3.2mm radius profile disc: For 1/4", 3/8" low profile, and 0.325" pitch saw chains.
- 4.7mm radius profile disc: For 3/8" pro and 0.404" pitch saw chains.
- 6.0mm flat profile disc: For depth gauge maintenance.

Refer to the operator instructions for detailed steps on safely installing and changing grinding wheels.



Figure 1: Oregon Professional Bench Grinder mounted and ready for use.



Figure 2: Product dimensions for installation planning.

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Video 1: Considerations for setting up the Oregon Sharpener 520-120.

4. OPERATING INSTRUCTIONS

Before operating, ensure all safety precautions are followed, including wearing appropriate personal protective equipment (PPE) such as safety glasses and gloves.

4.1 Adjusting the Grinder

- **Chain Clamping:** The manual chain clamping vice securely holds the chain in place during sharpening. Ensure the chain is properly seated and clamped.
- **Tooth Angle Adjustment:** Use the adjustment knobs to set the correct tooth angle for your specific chain. The grinder allows for precise adjustments to match the original factory angles or your preferred sharpening angle.
- **Pitch Adjustment:** Adjust the pitch of the grinding head to align with the chain tooth. This ensures the grinding wheel contacts the tooth at the correct angle.
- **Depth of Cut:** A knob at the back of the unit adjusts how far forward the stop is for your tooth, controlling the amount of material removed per cut.

4.2 Sharpening the Chain

1. Once the chain is clamped and all adjustments are set, activate the grinder. The built-in light will illuminate the work area.
2. Gently lower the grinding wheel onto the chain tooth. Apply light pressure to avoid overheating the chain.
3. After sharpening one tooth, release the grinding wheel, unclamp the chain, and advance it to the next tooth.
4. Repeat the process for all teeth on one side of the chain.
5. To sharpen the teeth on the opposite side, adjust the vice to the corresponding angle and repeat the sharpening process.



Figure 3: Detail of the chain clamping and adjustment knobs.



Figure 4: Grinding wheel in action, sharpening a chain tooth.

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Video 2: Demonstration of the Oregon Professional 120-Volt Bench Grinder in use.

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Video 3: User review highlighting the ease of use and consistency of the sharpener.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Oregon Bench Grinder.

- **Grinding Wheel Care:** Oregon's high-quality grinding wheels are designed to resist burning and leave a precision finish. Periodically inspect wheels for wear and replace them as needed. Use the included dressing brick and profile guide to maintain the wheel's shape and effectiveness.
- **Cleaning:** After each use, clean the grinder to remove sawdust and metal particles. This prevents buildup that could affect performance or cause damage.
- **Storage:** Store the grinder in a clean, dry environment when not in use.

6. TROUBLESHOOTING

If you encounter issues with your Oregon Bench Grinder, consider the following common troubleshooting steps:

- **Poor Sharpening Results:** Check that the correct grinding wheel is installed for your chain type. Verify all angle and depth adjustments are set according to your chain's specifications. Ensure the chain is securely clamped.
- **Overheating Chain:** Apply lighter pressure during grinding and avoid prolonged contact with the tooth. Overheating can damage the chain.
- **Excessive Vibration:** Ensure the grinder is securely mounted and all components are tightened. Check the grinding wheel for damage or improper installation.
- **Grinder Not Starting:** Check the power connection and ensure the switch is in the 'ON' position.

For persistent issues, consult the full operator instructions or contact Oregon customer support.

7. SPECIFICATIONS

Attribute	Value
Brand	Oregon
Model Number	520-120
Power Source	Corded Electric
Voltage	120 Volts
Horsepower	0.4
Material	Aluminum
Product Dimensions	15.4"L x 11.85"W x 10.3"H
Item Weight	18.41 pounds
UPC	036577563631

8. WARRANTY AND SUPPORT

For warranty information, product registration, or technical support, please refer to the official Oregon Tool website or the documentation included with your product. Keep your purchase receipt for warranty claims.

