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› ARROWMAX 30-Piece 2.35mm Shank Wood Engraving Carving Bit Set User Manual

ARROWMAX 199223

ARROWMAX 30-Piece 2.35mm Shank Carving Bit Set

Model: 199223

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your ARROWMAX 30-piece carving bit set. These bits are designed for precision engraving, carving, and detailing across various materials, compatible with most rotary tools featuring a 2.35mm shank.

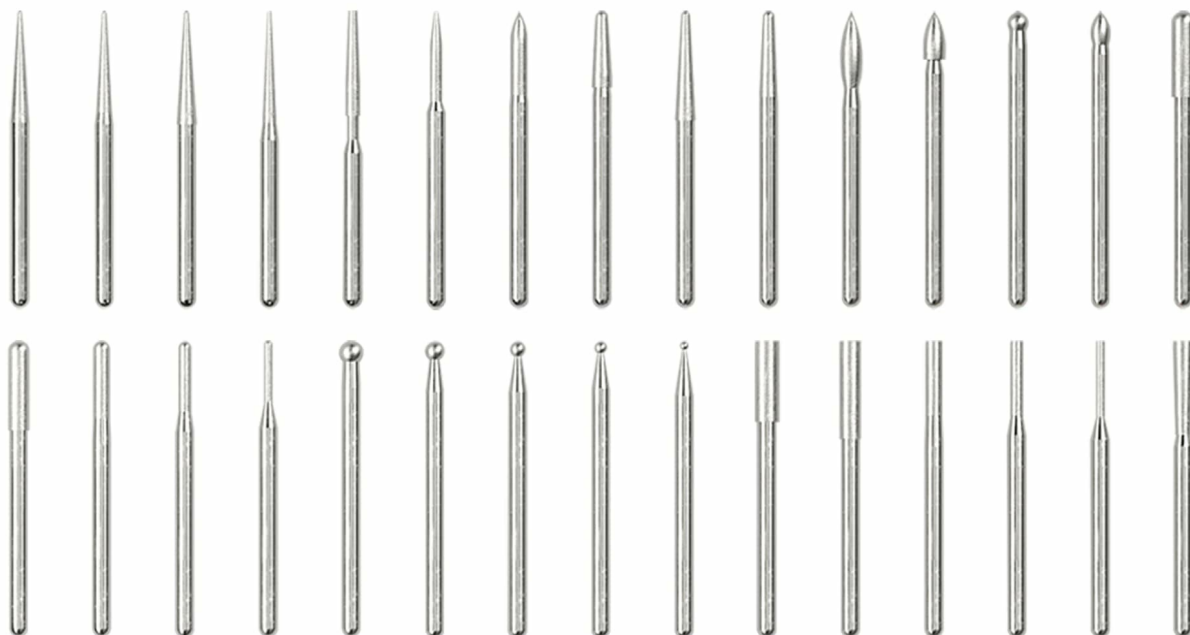


Image 1.1: Overview of the ARROWMAX 30-piece carving bit set, including the bits, storage case, and a compatible rotary tool.

2. PRODUCT FEATURES

- **Versatile Selection:** Includes 30 different shapes and types of engraving bits to accommodate various carving, beveling, chamfering, grooving, reaming, and hollowing tasks.
- **High Compatibility:** Equipped with a standard 2.35mm shank, these bits are compatible with most mini-grinding rotary tools and die grinders, including ARROWMAX, Craftsman, Chicago, Silverline, GMC, and CNC machinery.
- **Durable Construction:** Manufactured from Diamond Steel, ensuring long life, exceptional precision, good wear resistance, and heat resistance for consistent performance.
- **Wide Application:** Suitable for detailed work on materials such as wood, ABS, acrylic, PVC, and various plastics. Ideal for crafting projects like dollhouse furniture, model trains, and miniature structures.
- **Convenient Storage:** Comes with a compact mini storage box for organized and secure keeping of all 30 bits.

DETAILS OF THE BITS

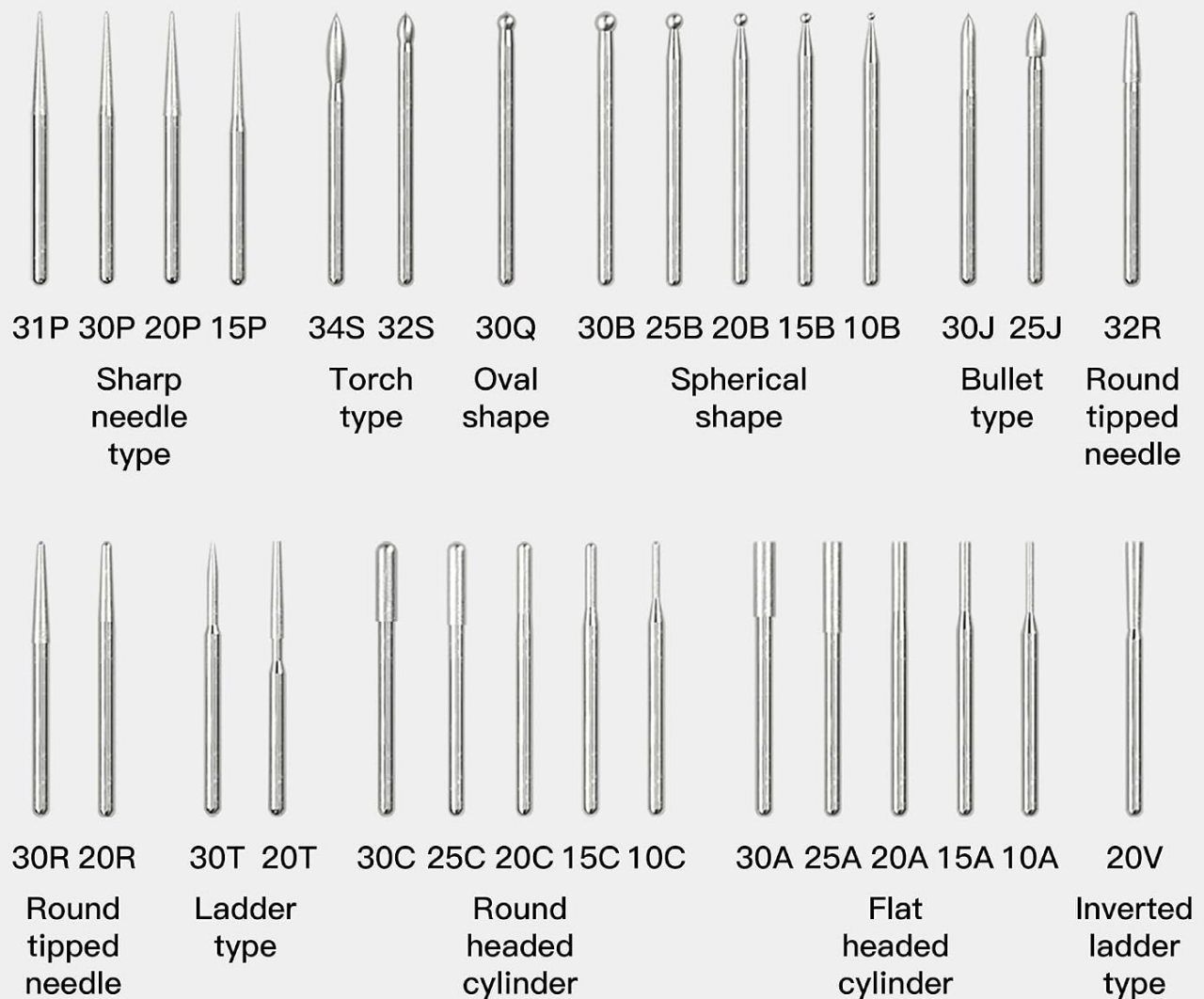


Image 2.1: Detailed illustration of the 30 different bit shapes included in the set, categorized by type (e.g., sharp needle, oval, spherical, bullet, round tipped, ladder, cylinder).

Product Details Analysis

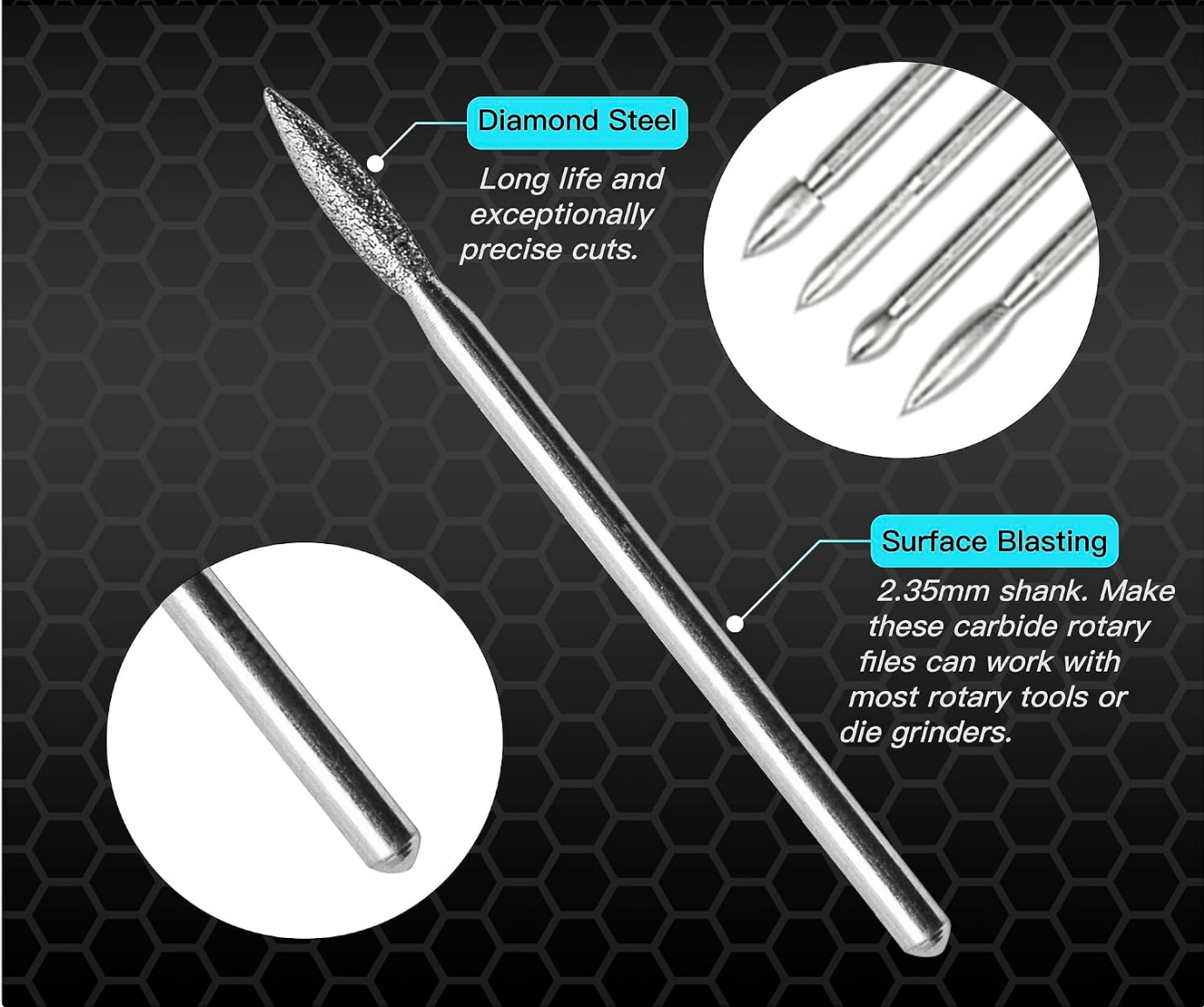


Image 2.2: Close-up view highlighting the Diamond Steel construction for precise cuts and the surface blasting treatment on the 2.35mm shank for compatibility with rotary tools.

3. SPECIFICATIONS

Feature	Detail
Model Number	199223
Shank Diameter	2.35 mm
Number of Bits	30
Material	Diamond Steel
Cut Types	Chamfer Cut, Groove Cut, Rail & Stile Cut, Straight Cut (various shapes for engraving, beveling, reaming, hollowing)

Feature	Detail
Item Weight	2.39 ounces
Package Dimensions	5.55 x 2.83 x 0.75 inches

Details of the Bits

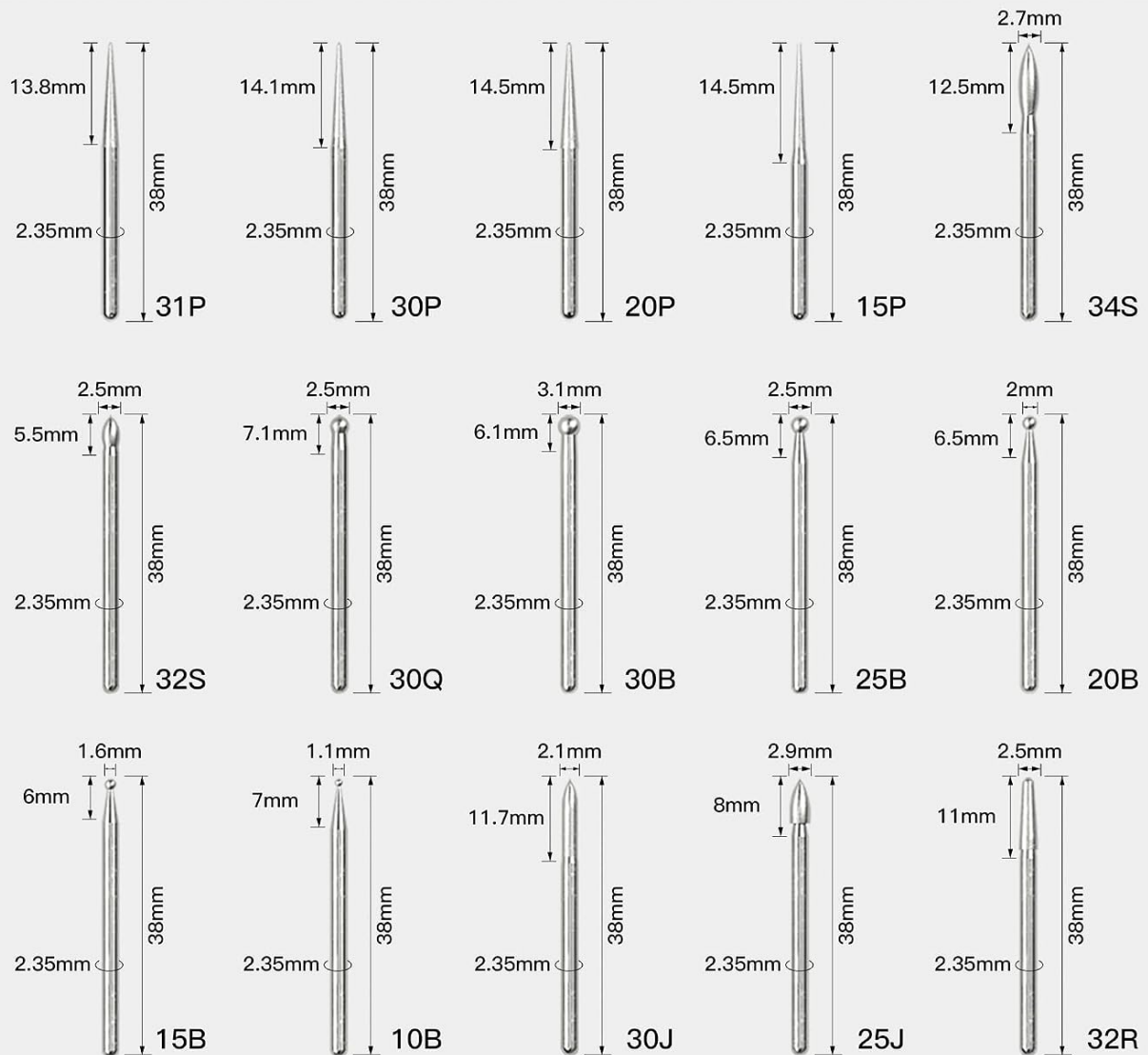


Image 3.1: Technical drawing showing precise dimensions (length, diameter) for several bit types, including 31P, 30P, 20P, 15P, 34S, 32S, 30Q, 30B, 25B, 20B, 15B, 10B, 30J, 25J.

Details of the Bits

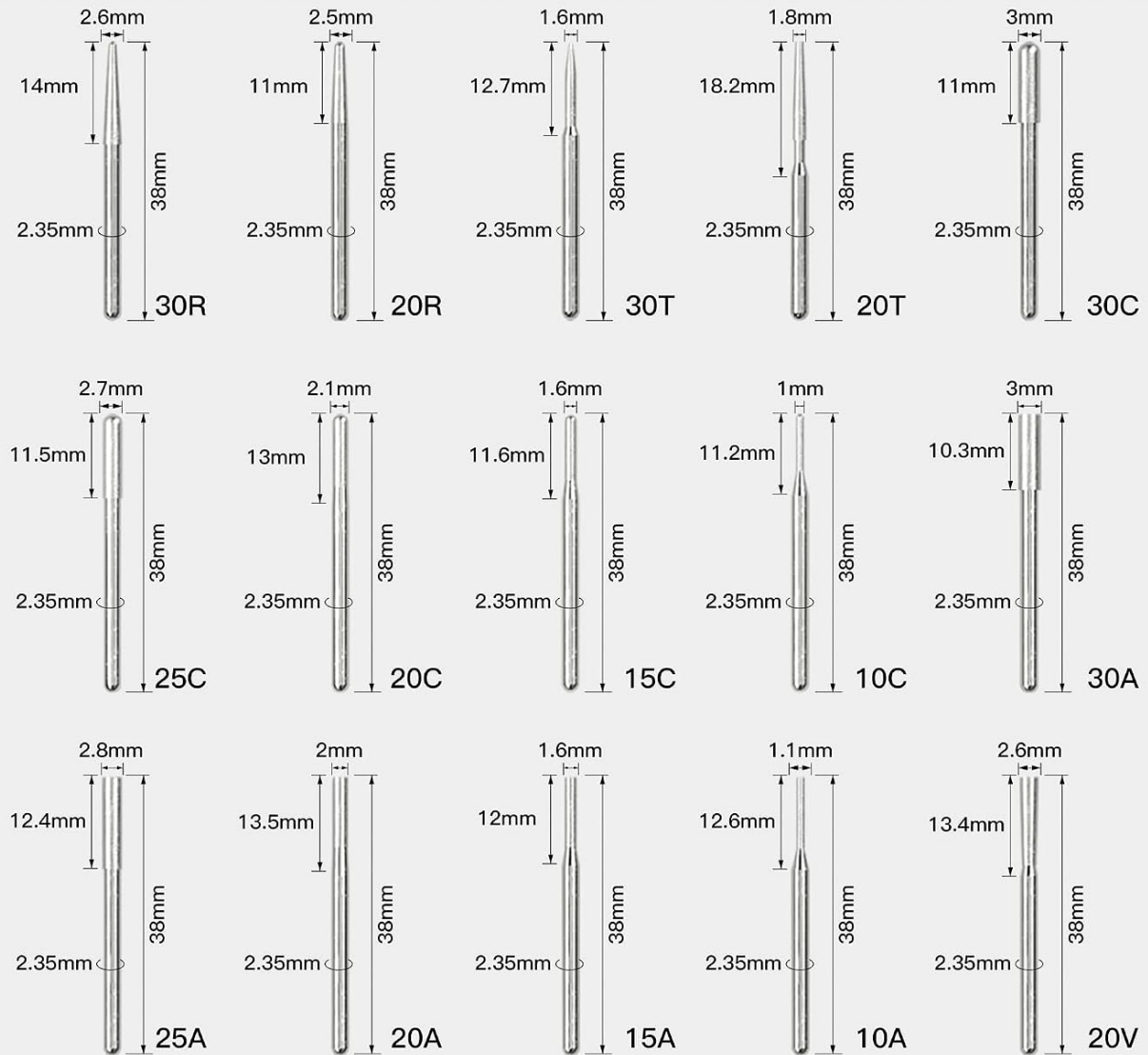


Image 3.2: Technical drawing showing precise dimensions (length, diameter) for additional bit types, including 30R, 20R, 30T, 20T, 30C, 25C, 20C, 15C, 10C, 30A, 25A, 20A, 15A, 10A, 20V.

4. SETUP

- Compatibility Check:** Ensure your rotary tool or die grinder is compatible with a 2.35mm shank. Most standard mini-grinding tools will accept this size.
- Select the Right Bit:** Refer to the bit shape diagrams (Image 2.1) and dimensions (Images 3.1, 3.2) to choose the appropriate bit for your specific carving or engraving task.
- Insert the Bit:** Loosen the collet nut on your rotary tool. Insert the shank of the chosen carving bit fully into the collet. Tighten the collet nut securely to prevent the bit from slipping during operation. Do not overtighten.
- Safety Gear:** Always wear appropriate personal protective equipment, including safety glasses, gloves, and a dust mask, before operating any rotary tool.

5. OPERATING INSTRUCTIONS

Follow these guidelines for effective and safe operation of your ARROWMAX carving bits:

- **Secure Workpiece:** Always secure your workpiece firmly to prevent movement during carving. Use clamps or a vise as needed.
- **Start Slow:** Begin with a lower speed setting on your rotary tool, especially when working with new materials or performing delicate tasks. Gradually increase speed as needed and as you gain control.
- **Light Pressure:** Apply light, consistent pressure. Excessive force can cause the bit to bind, break, or damage the workpiece. Allow the bit to do the work.
- **Maintain Control:** Hold the rotary tool firmly with both hands if possible, or use a stable grip for single-handed operation. Ensure good balance and control over the tool's movement.
- **Material Specifics:**
 - *Wood:* Carve along the grain for smoother cuts. For cross-grain work, use a slower speed and lighter touch to prevent splintering.
 - *Plastics (ABS, Acrylic, PVC):* Use moderate speeds to avoid melting the plastic. Test on a scrap piece first to find the optimal speed.
- **Ventilation:** Work in a well-ventilated area to disperse dust and fumes generated during carving.



Image 5.1: An individual demonstrating the use of a rotary tool with an ARROWMAX carving bit for intricate detailing on a small workpiece.



Image 5.2: A user performing carving on a wooden object, illustrating the application of the bits in woodworking projects.

6. MAINTENANCE

- **Cleaning:** After each use, clean the bits to remove any accumulated dust or debris. A small brush or compressed air

can be used. Ensure bits are dry before storage.

- **Inspection:** Regularly inspect bits for signs of wear, damage, or dullness. Replace worn bits to maintain optimal performance and safety.
- **Storage:** Store the bits in their provided mini storage box in a dry, cool place to prevent rust and damage. Keep them out of reach of children.

7. TROUBLESHOOTING

- **Bit Not Cutting Effectively:**
 - Check if the bit is dull or damaged. Replace if necessary.
 - Ensure the rotary tool speed is appropriate for the material.
 - Verify that the correct bit type is being used for the task and material.
- **Bit Slipping in Collet:**
 - Ensure the collet nut is tightened securely.
 - Confirm the bit shank is fully inserted into the collet.
 - Check if the collet or collet nut is worn and needs replacement.
- **Excessive Vibration or Noise:**
 - Ensure the bit is properly seated and tightened in the collet.
 - Inspect the bit for bends or damage. A damaged bit can cause imbalance.

8. WARRANTY AND SUPPORT

Your ARROWMAX 30-piece carving bit set comes with a **12-month warranty**. This warranty covers manufacturing defects and ensures the quality of the product under normal use.

For customer service, technical support, or warranty claims, please contact ARROWMAX customer service through the retailer where the product was purchased or visit the official ARROWMAX store online.

For more information about ARROWMAX products, visit the [ARROWMAX Store](#).

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question