

## Bahco 460-PB-1

# Bahco 460-PB-1 Lip and Spur Wood Drill Bit Set Instruction Manual

Comprehensive guide for safe and effective use of your Bahco drill bit set.

## INTRODUCTION

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This manual provides essential instructions for the proper use, maintenance, and care of your Bahco 460-PB-1 Lip and Spur Drill Bit Set. These drill bits are specifically designed for precision drilling in solid wood, chipboard, and wood fiber board. Adhering to these guidelines will ensure optimal performance and extend the lifespan of your tools.

## PRODUCT OVERVIEW

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The Bahco 460-PB-1 set includes five lip and spur drill bits, ranging in common sizes for various woodworking tasks. Each bit is crafted from hardened and tempered chrome-vanadium steel, ensuring durability and precision. The lip and spur design allows for clean, accurate holes with minimal splintering.

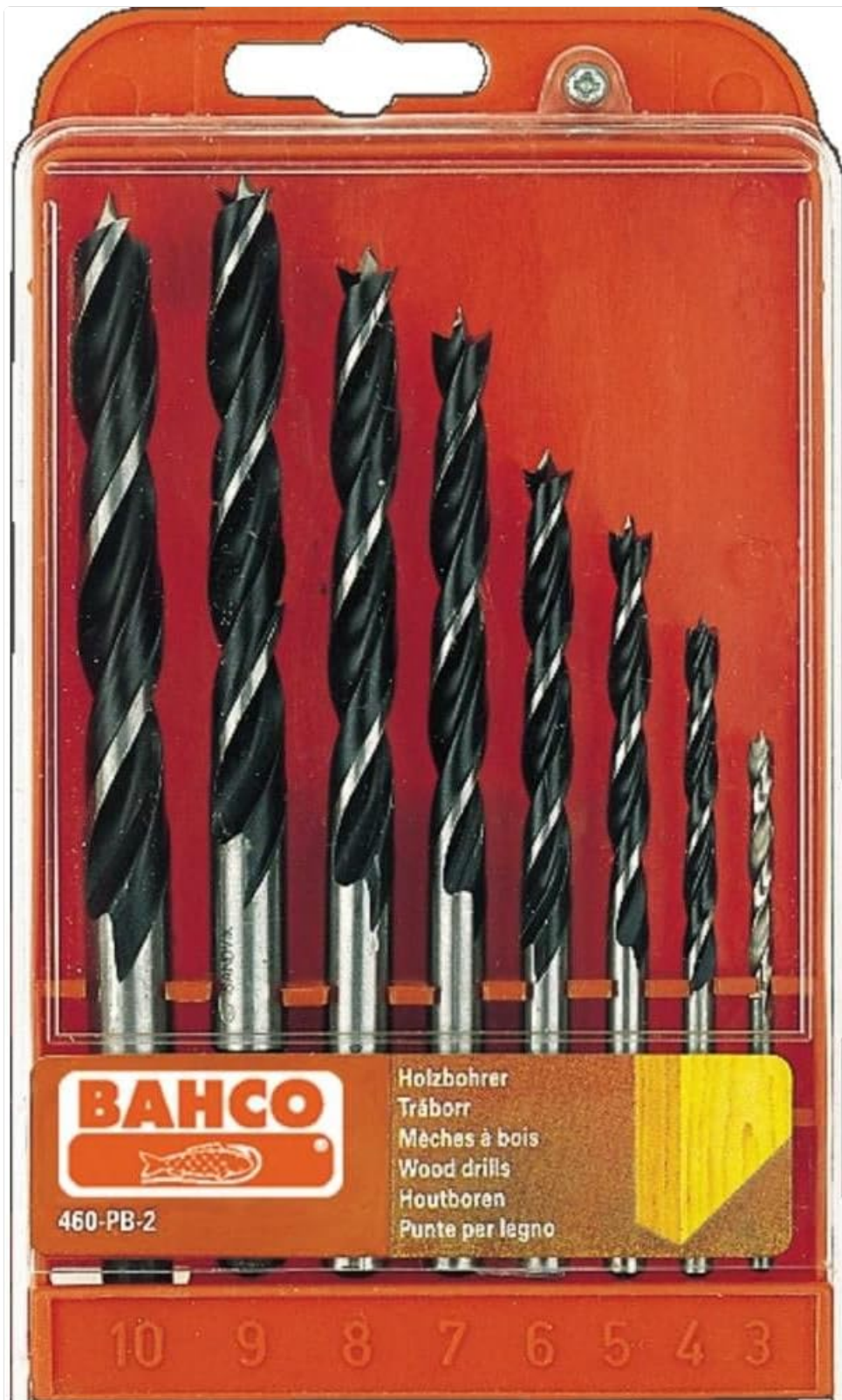


Image 1: The Bahco 460-PB-1 Lip and Spur Drill Bit Set, presented in its protective plastic storage box. The set includes five drill bits of varying sizes, clearly visible through the transparent lid.

- **Material:** Hardened and tempered chrome-vanadium steel for strength and longevity.
- **Sizes Included:** 4mm, 5mm, 6mm, 8mm, 10mm, suitable for a range of common drilling applications.
- **Design:** Lip and spur (brad-point) tip for precise starting and clean hole edges.



Image 2: A close-up view of a single Bahco Lip and Spur Drill Bit, highlighting the central point (spur) for accurate positioning

and the cutting edges (lips) designed for clean wood removal.

## SETUP

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1. **Safety First:** Always wear appropriate personal protective equipment, including safety glasses, to protect against flying debris. Secure your workpiece firmly with clamps or a vise to prevent movement during drilling.
2. **Select the Correct Bit:** Choose the drill bit size appropriate for your project. The sizes are marked on the plastic case and often on the shank of the bits.
3. **Insert into Drill Chuck:** Loosen the drill chuck jaws. Insert the shank of the chosen drill bit into the chuck, ensuring it is seated deeply and centrally. Tighten the chuck securely by hand, then use a chuck key (if applicable) to ensure the bit is firmly gripped and will not slip during operation.
4. **Check Bit Security:** Briefly run the drill at a low speed to ensure the bit runs true and is securely fastened. If the bit wobbles, re-seat and re-tighten it.

## OPERATING INSTRUCTIONS

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1. **Mark the Drilling Point:** Clearly mark the exact center of where you intend to drill. The spur point of these bits will help prevent wandering.
2. **Position the Bit:** Place the spur point of the drill bit directly on your marked drilling point.
3. **Start Drilling:** Begin drilling at a low to medium speed. Apply steady, even pressure. Avoid excessive force, as this can cause the bit to overheat, burn the wood, or splinter the material.
4. **Maintain Speed and Pressure:** Once the bit has engaged the wood, increase the drill speed to an appropriate level for the wood type. Continue with steady pressure, allowing the bit to cut efficiently.
5. **Clear Chips:** For deeper holes, periodically withdraw the bit slightly to clear wood chips from the flutes. This prevents clogging and reduces heat buildup.
6. **Complete the Hole:** As the bit approaches the exit point of the material (if drilling through), reduce pressure to minimize tear-out on the backside. For very clean holes, you can place a sacrificial piece of wood underneath your workpiece.
7. **Withdraw the Bit:** Once the hole is complete, withdraw the bit from the workpiece while the drill is still rotating to prevent snagging.

## MAINTENANCE

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- **Cleaning:** After each use, clean the drill bits to remove wood dust and resin. A stiff brush or cloth can be used. For stubborn resin, a specialized bit cleaner can be applied.
- **Lubrication/Protection:** Apply a light coat of machine oil or rust preventative to the bits, especially if

storing for extended periods or in humid environments, to prevent corrosion.

- **Storage:** Store the drill bits in their original plastic case or a dedicated drill bit organizer. This protects the cutting edges from damage and keeps the set organized.
- **Inspection:** Regularly inspect the cutting edges for dullness or damage. Dull bits can cause burning, splintering, and require excessive force. Sharpening should be performed by a qualified professional or with appropriate sharpening tools.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Splintering or tear-out around the hole	Excessive pressure, dull bit, drilling too fast, no backing material.	Reduce pressure, use a sharp bit, decrease drill speed, use a sacrificial backing board.
Bit burning the wood	Dull bit, insufficient chip clearance, drilling too slowly, excessive friction.	Use a sharp bit, clear chips frequently, increase drill speed slightly (if appropriate for material), reduce pressure.
Bit wandering at start	Insufficient marking, uneven surface, bit not properly centered.	Ensure clear marking, use a center punch for very hard woods, ensure bit is securely chucked and running true.
Difficulty drilling or slow progress	Dull bit, incorrect drill speed, insufficient pressure.	Sharpen or replace bit, adjust drill speed, apply steady, firm pressure.

## SPECIFICATIONS

Feature	Detail
Model Number	460-PB-1
Material	Hardened and tempered chrome-vanadium steel
Included Sizes	4mm, 5mm, 6mm, 8mm, 10mm
Shank Type	Straight
Finish Type	Chrome
Tool Flute Type	Spiral
Surface Recommendation	Wood, Chipboard, Wood Fiber Board
Item Weight	5.6 ounces (approximate for the set)

Feature	Detail
Product Dimensions (L x W x H)	6.3 x 2.52 x 0.87 inches (packaging)

## WARRANTY AND SUPPORT

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Bahco products are manufactured to high standards. For information regarding warranty coverage, product support, or to inquire about replacement parts, please refer to the official Bahco website or contact your local Bahco distributor. Keep your purchase receipt as proof of purchase.