

HCB91K1/HCB91B

Hercules 20V Brushless Cordless 1/2-inch Drill/Driver Instruction Manual

Model: HCB91K1/HCB91B | Brand: Generic

1. INTRODUCTION

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your Hercules 20V Brushless Cordless 1/2-inch Drill/Driver. This tool features a high-performance brushless motor, a two-speed transmission, and 14 clutch settings, designed for various drilling and driving applications. Please read this manual thoroughly before first use and retain it for future reference.

2. SAFETY INFORMATION

Always follow basic safety precautions to reduce the risk of fire, electric shock, and personal injury when using power tools. Keep your work area clean and well-lit. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Always wear appropriate personal protective equipment, including eye protection, hearing protection, and gloves.

- **Work Area Safety:** Keep children and bystanders away while operating a power tool.
- **Electrical Safety:** Avoid body contact with earthed or grounded surfaces. Do not expose power tools to rain or wet conditions.
- **Personal Safety:** Stay alert, watch what you are doing, and use common sense. Do not use the tool while tired or under the influence of drugs, alcohol, or medication.
- **Power Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. Disconnect the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.
- **Battery Tool Use and Care:** Recharge only with the charger specified by the manufacturer. Use power tools only with specifically designated battery packs.

3. COMPONENTS OVERVIEW

Familiarize yourself with the various parts of your Hercules 20V Brushless Cordless 1/2-inch Drill/Driver for proper and safe operation.



Figure 1: Hercules 20V Brushless Cordless 1/2-inch Drill/Driver in use. This image illustrates the drill/driver with a bit engaged in a wooden block, demonstrating its primary function. The tool features a black and blue housing, a chuck, and a handle. A person in safety gear is visible in the background, indicating proper usage context.

Included Components:

- Hercules 20V Brushless Cordless 1/2-inch Drill/Driver (Tool Only)
- Belt Clip
- Side Handle
- Bit Holder

Note: Battery and charger are sold separately and are required for operation.

4. SETUP

4.1 Battery Installation (Battery Sold Separately)

1. Ensure the drill/driver is switched off.
2. Align the battery pack with the battery port on the base of the drill handle.
3. Slide the battery pack into the port until it clicks securely into place.
4. To remove, press the battery release button and slide the battery pack out.

4.2 Chuck Operation and Bit Installation

1. Ensure the drill/driver is switched off and the battery is removed for safety.
2. Grasp the rear half of the chuck firmly with one hand.
3. Rotate the front half of the chuck counter-clockwise to open the chuck jaws.
4. Insert the desired drill bit or driver bit into the chuck, ensuring it is centered.
5. Rotate the front half of the chuck clockwise to tighten the jaws securely around the bit. The 1/2-inch ratcheting chuck provides a strong grip.
6. Pull on the bit to ensure it is firmly seated before operation.

5. OPERATING INSTRUCTIONS

5.1 Speed Selection

The drill/driver features a two-speed transmission for optimal performance across different applications.

- **Speed 1 (Low):** Provides higher torque for driving screws and drilling larger holes in tougher materials.
- **Speed 2 (High):** Provides higher speed for faster drilling in softer materials and smaller holes.

To change speeds, locate the speed selector switch on top of the drill and slide it to the desired setting. Always change speeds when the tool is stopped.

5.2 Clutch Settings

The drill/driver has 14 clutch settings, allowing you to control the amount of torque applied. This prevents over-driving screws and damaging work surfaces or fasteners.

1. Rotate the clutch collar, located behind the chuck, to select the desired setting.
2. Lower numbers indicate lower torque for smaller screws or softer materials.
3. Higher numbers indicate higher torque for larger screws or harder materials.
4. The drill icon setting bypasses the clutch for maximum torque when drilling.

Start with a lower clutch setting and increase it as needed until the desired driving depth is achieved without stripping the screw head or damaging the material.

5.3 LED Work Light

A bright LED light is integrated into the tool to illuminate the work area, improving visibility in dimly lit conditions. The light activates when the trigger is pressed.

5.4 Drilling and Driving Techniques

- Always secure your workpiece to prevent movement.
- Apply steady, even pressure. Do not force the tool.
- For drilling, start with a pilot hole if necessary, especially in hard materials or near edges.
- For driving, ensure the bit is fully engaged with the screw head to prevent cam-out.
- Maintain a firm grip on the tool, utilizing the textured overmold for comfort and control.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your drill/driver.

- **Cleaning:** Keep the tool's ventilation openings clear and free of debris. Use a soft, damp cloth to clean the exterior. Do not use harsh chemicals or abrasive cleaners.

- **Inspection:** Periodically inspect the chuck for wear and ensure all screws are tight. Check the power cord (if applicable to charger, not tool) and battery for damage.
- **Storage:** Store the tool in a dry, secure location out of reach of children. Remove the battery pack before storing for extended periods.

7. TROUBLESHOOTING

If you encounter issues with your drill/driver, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Tool does not start.	Battery not charged or improperly installed.	Ensure battery is fully charged and correctly inserted.
Loss of power during operation.	Battery charge is low. Overload protection activated.	Recharge battery. Reduce pressure on the tool or use a lower speed/higher torque setting.
Bit slips in chuck.	Chuck not tightened sufficiently. Bit shank is dirty or damaged.	Retighten chuck firmly. Clean or replace the bit.
Screws are stripped or over-driven.	Clutch setting is too high.	Adjust the clutch to a lower setting.

8. SPECIFICATIONS

Feature	Detail
Brand	Generic
Model Number	HCB91K1/HCB91B
Power Source	Battery Powered (20 Volts)
Motor Type	Brushless
Maximum Rotational Speed	2000 RPM
Maximum Chuck Size	0.5 Inches (1/2 inch)
Maximum Torque	1200 Inch Pounds
Number of Speeds	2
Item Weight	5.07 Pounds
Product Dimensions	7.18"L x 3.5"W x 9"H
Drilling Capacity (Wood)	2 Inches
Drilling Capacity (Metal)	1 Inch
Included Components	Belt clip, side handle, bit holder

9. WARRANTY AND SUPPORT

9.1 Warranty Information

The manufacturer guarantees this product to be free from defects in materials and workmanship for 90 days from the date of purchase. Limitations apply. Please retain your proof of purchase for warranty claims.

9.2 Customer Support

For technical assistance, replacement parts, or warranty inquiries, please contact the retailer or manufacturer's customer service department. Refer to your purchase documentation for specific contact details.