DEWALT DW222

DEWALT DW222 3/8-Inch Variable Speed Reversible Corded Drill Instruction Manual

Model: DW222

1. Product Overview

The DEWALT DW222 is a 3/8-inch Variable Speed Reversible Corded Drill designed for various drilling applications. It features a robust construction with helical-cut steel and heat-treated steel gears, ensuring durability and a long operational life. The ergonomic design includes a rubber grip and a two-finger trigger for enhanced user comfort and control during operation.
Key features include:

- **Durable Gear Construction:** Helical-cut steel and heat-treated steel gears for extended tool life.
- **Keyless Chuck:** Single-sleeve keyless chuck with spindle lock for quick and secure bit changes without additional tools.
- **Comfort and Control:** Ergonomic rubber grip and a two-finger trigger for improved handling and reduced fatigue.
- **Variable Speed and Reversible:** Allows for precise control over drilling speed and direction for various materials and tasks.



Figure 1: The DEWALT DW222 3/8-inch Variable Speed Reversible Corded Drill. This image displays the drill's main body, chuck, handle, and power cord connection.

2. General Safety Instructions

Always follow basic safety precautions when using electrical tools to reduce the risk of fire, electric shock, and personal injury. Read all instructions before operating this product.

- **Work Area Safety:** Keep your work area clean and well-lit. Cluttered or dark areas invite accidents. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- **Electrical Safety:** Power tool plugs must match the outlet. Never modify the plug in any way. Do not abuse the cord. Never use the cord for carrying, pulling, or unplugging the power tool. Keep cord away from heat, oil, sharp edges, or moving parts.
- **Personal Safety:** Always wear eye protection. Use hearing protection when operating for extended periods. Dress properly; do not wear loose clothing or jewelry. Keep hair, clothing, and gloves away from moving parts.
- **Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.
- **Service:** Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

3. Components and Features

Familiarize yourself with the various parts of your DEWALT DW222 drill for safe and effective operation.

- **Keyless Chuck:** Located at the front of the drill, designed for quick and tool-free bit changes.
- **Spindle Lock:** Integrated into the chuck mechanism, it locks the spindle for easier bit installation and removal.
- **Variable Speed Trigger:** Controls the rotational speed of the drill. Pressing the trigger further increases the speed.
- **Forward/Reverse Switch:** A lever or button near the trigger that changes the direction of rotation for drilling or removing screws.
- **Rubber Grip Handle:** Provides a secure and comfortable hold, reducing vibration and improving control.
- **Power Cord:** Connects the drill to an electrical outlet.



Figure 2: Illustration of the DEWALT DW222 drill highlighting its key components such as the keyless chuck, trigger, and handle.

4. Setup

1. **Select the Correct Bit:** Choose a drill bit appropriate for the material you are drilling and the desired hole size. Ensure the bit is sharp and in good condition.

2. **Install the Drill Bit:**
    - Unplug the drill from the power source.
    - Grasp the rear half of the keyless chuck and rotate the front half counter-clockwise until the chuck jaws are open wide enough to accept the drill bit.
    - Insert the shank of the drill bit fully into the chuck.
    - Tighten the chuck by rotating the front half clockwise while holding the rear half firmly. Ensure the bit is centered and securely clamped.
    - Give the bit a slight tug to confirm it is locked in place.
3. **Connect to Power:** Plug the drill into a standard 120V AC electrical outlet. Ensure the outlet is properly grounded.
4. **Check Direction:** Before drilling, set the forward/reverse switch to the desired direction. For drilling, the switch should be in the forward position.

5. Operating Instructions

1. **Secure Workpiece:** Always secure the material you are drilling to prevent it from moving during operation. Use clamps or a vise.
2. **Position the Drill:** Hold the drill firmly with both hands if possible, or with one hand on the grip and the other supporting the tool. Position the drill bit at the desired drilling location.
3. **Start Drilling:**
    - Gently press the variable speed trigger to start the drill at a low speed. This helps prevent the bit from "walking" on the surface.
    - Gradually increase pressure on the trigger to achieve the desired drilling speed.
    - Apply steady, even pressure to the drill. Do not force the drill, allow the bit to do the work.
4. **Maintain Control:** Keep a firm grip on the drill throughout the drilling process. Be prepared for the drill to bind or kick back, especially when breaking through material.
5. **Reverse Function:** To remove a drill bit that has become stuck or to drive/remove screws, set the forward/reverse switch to the reverse position.
6. **Cooling:** For prolonged drilling, especially in metal, periodically withdraw the bit from the hole to allow chips to clear and the bit to cool. Use cutting fluid when appropriate.
7. **Finishing:** Once the hole is complete, release the trigger and wait for the drill bit to stop rotating before removing it from the workpiece.

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your DEWALT DW222 drill.

- **Cleaning:** Keep the ventilation openings clear and free of dust and debris. Use a clean, dry cloth to wipe down the tool. Do not use water or chemical cleaners.
- **Cord Inspection:** Regularly inspect the power cord for any signs of damage, cuts, or fraying. Replace damaged cords immediately by a qualified service technician.
- **Chuck Maintenance:** Keep the chuck jaws clean. Periodically open and close the chuck fully to ensure smooth operation.
- **Brush Inspection (if applicable):** If your model has user-serviceable carbon brushes, inspect them periodically for wear and replace them when they reach their wear limit. Refer to a service manual or qualified technician for this procedure.
- **Storage:** Store the drill in a dry, secure location out of reach of children and away from extreme

temperatures.

7. Troubleshooting

Problem	Possible Cause	Solution
Drill does not start	No power supply; Damaged cord/plug; Faulty switch	Check power outlet and connections. Inspect cord for damage. If cord is damaged, have it replaced by a qualified technician.
Bit slips in chuck	Chuck not tightened sufficiently; Bit shank is dirty or damaged	Ensure chuck is fully tightened. Clean or replace the drill bit.
Excessive vibration or noise	Bent drill bit; Loose chuck; Internal component issue	Replace bent drill bit. Re-tighten chuck. If problem persists, discontinue use and contact service.
Drill overheats	Overloading the drill; Blocked ventilation slots; Dull drill bit	Reduce load. Clear ventilation slots. Use sharp drill bits. Allow drill to cool.

8. Specifications

Model Number	DW222
Power Source	Corded Electric
Voltage	120 Volts
Amperage	6.7 Amps
Wattage	500 watts (Maximum Power: 520 Watts)
Maximum Rotational Speed	1200 RPM
Chuck Size	3/8 inches (0.38 inches)
Special Feature	Variable Speed, Reversible
Material	Blend (Helical-cut steel and heat-treated steel gears)
Product Dimensions	30.48 x 26.04 x 7.62 cm
Item Weight	10 g *(Note: This weight seems unusually low for a corded drill and might be a data entry error. Please refer to the product packaging for accurate weight.)*
Included Components	3/8IN DRILL (main unit)

9. Warranty and Support

This DEWALT DW222 drill comes with a **90 Day Money Back Guarantee**. For specific terms and conditions, please refer to the warranty card included with your product or visit the official DEWALT website.
For technical assistance, service, or to locate an authorized service center, please contact DEWALT customer support through their official website or the contact information provided in your product packaging.

Online Resources: For additional information, product registration, and frequently asked questions, please visit www.DEWALT.com.