

VEVOR DP2501A

VEVOR 10-inch Benchtop Drill Press Instruction Manual

Model: DP2501A

1. INTRODUCTION

Thank you for choosing the VEVOR 10-inch Benchtop Drill Press. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your new tool. Please read this manual thoroughly before initial use and retain it for future reference.





Figure 1: VEVOR 10-inch Benchtop Drill Press Overview

2. SAFETY INSTRUCTIONS

Always prioritize safety when operating power tools. Failure to follow these instructions may result in serious injury or property damage.

- **Read the Manual:** Understand all operating procedures and safety warnings before use.
- **Wear Personal Protective Equipment (PPE):** Always wear safety glasses or a face shield. Hearing protection and dust masks are recommended.
- **Secure Workpiece:** Always clamp the workpiece firmly to the worktable to prevent movement during drilling. Never hold the workpiece by hand.
- **Clear Work Area:** Keep the work area clean, well-lit, and free from clutter.
- **Avoid Distractions:** Do not operate the drill press when tired, under the influence of drugs, alcohol, or medication.
- **Proper Clothing:** Do not wear loose clothing, gloves, neckties, or jewelry that can get caught in moving parts. Tie back long hair.
- **Electrical Safety:** Ensure the power supply matches the tool's requirements. Do not operate in damp or wet conditions.
- **Unplug Before Adjustments:** Always disconnect the power before changing accessories, making adjustments, or performing maintenance.

- **Use Correct Speed:** Select the appropriate drilling speed for the material and drill bit size.
- **Maintain Tool:** Keep tools sharp and clean for better and safer performance.

3. PRODUCT COMPONENTS

Familiarize yourself with the main parts of your VEVOR Benchtop Drill Press.

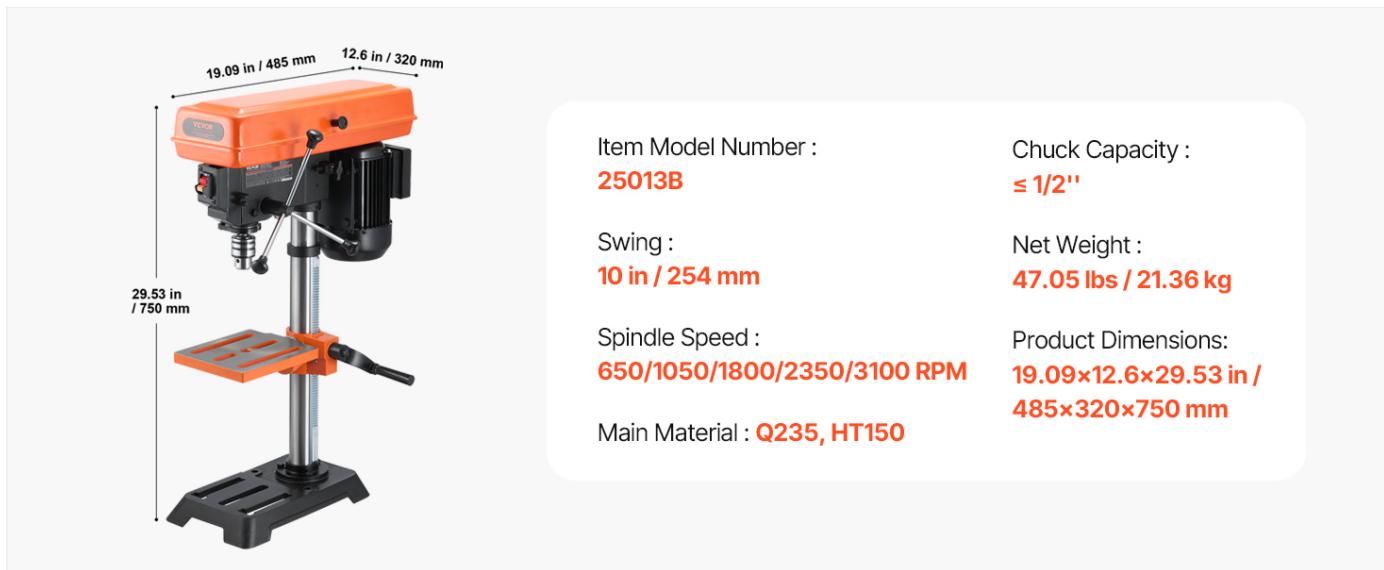


Figure 2: Key Components of the Drill Press

1. **5-Speed Adjustable Pulley System:** Allows for variable speed settings.
2. **6.2A Motor:** Powerful induction motor for consistent performance.
3. **Secure & Waterproof Switch:** Main power switch with safety features.
4. **1/2 Inch Chuck:** Holds various drill bit sizes securely.
5. **Φ1.89" Thickened Column:** Provides stability and rigidity.
6. **Steel Plate Worktable & Base:** Durable and stable platform for workpieces.

4. SETUP

Follow these steps to assemble your drill press.

1. **Unpacking:** Carefully remove all components from the packaging. Verify all parts are present against the packing list.
2. **Base and Column Assembly:** Attach the column to the base using the provided fasteners. Ensure it is securely tightened.
3. **Head Assembly:** Mount the drill press head onto the top of the column. Secure it in place with the appropriate screws or clamps.
4. **Worktable Installation:** Slide the worktable assembly onto the column. Adjust its height and secure it using the locking handle.
5. **Handle Installation:** Attach the feed handles to the spindle quill.
6. **Chuck Installation:** Insert the chuck onto the spindle. Ensure it is seated firmly.
7. **Power Connection:** Connect the power cord to a suitable electrical outlet.

For visual guidance on assembly, refer to the following video demonstrating a similar drill press setup process.

No specific assembly video for this model is available from the seller. Please refer to the written instructions and diagrams.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off

To turn on the drill press, press the green 'ON' button. To turn it off, press the red 'OFF' button. The switch is designed to be secure and waterproof.

5.2 Speed Adjustment

The VEVOR drill press features a variable 5-speed control system, allowing speeds from 610 to 2800 RPM. To adjust the speed, open the top cover and reposition the drive belt on the pulleys according to the desired RPM. A diagram inside the cover typically indicates the belt configurations for different speeds.



Figure 3: Adjusting Belt for Speed Control

5.3 Depth Adjustment

Set precise drilling depths using the adjustable depth stop. This feature ensures consistent hole depths, which is crucial for repetitive tasks. The spindle travel is 2 inches.



Figure 4: Setting the Adjustable Depth Stop

5.4 Worktable Adjustment

The thick metal worktable can be adjusted in height and tilted up to 45 degrees left or right. Loosen the locking mechanism, adjust the table to the desired position, and then securely tighten the lock.

Precision Positioning For Complex Drilling

Table supports height and 45° left / right adjustments



Figure 5: Adjusting and Tilting the Worktable

5.5 LED Lighting & X-Ray Positioning

An integrated LED work light illuminates your work area for clear visibility, even in low-light conditions. The X-ray positioning system assists in accurately locating drilling spots for precision work.

Assist You In Accurate Drill Positioning

Equipped with X-ray to clearly show the drill's planned location



X-Ray

Enhanced Positioning Assistance

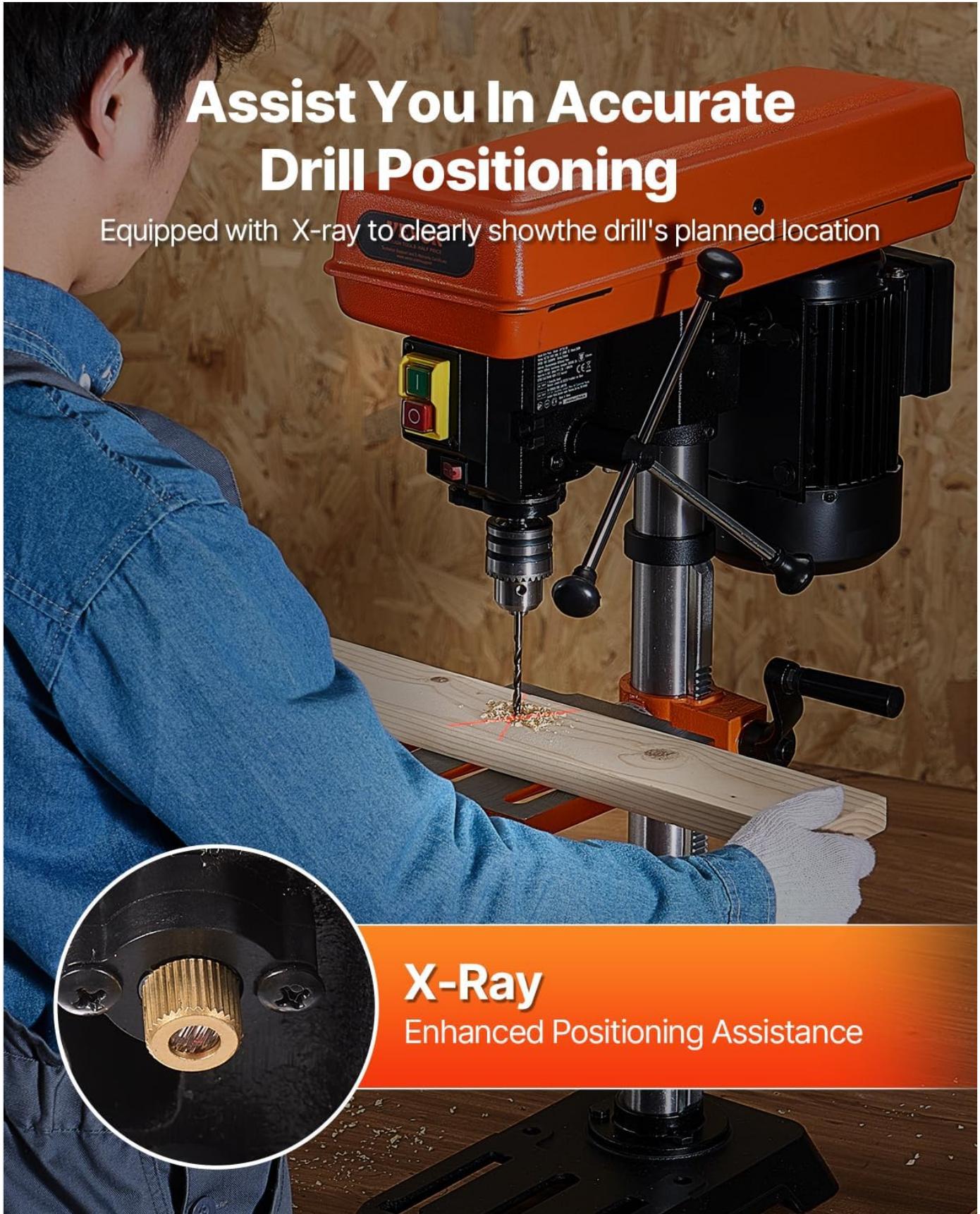


Figure 6: Using LED Light and X-Ray Positioning

5.6 Chuck Operation

The 1/2-inch chuck securely holds various drill bits. To insert or remove a drill bit, use the chuck key to loosen or tighten the jaws. Ensure the bit is centered and firmly secured before operation to prevent slippage and ensure precision.

Secure Clamping Minimal Slippage

Reduce tool or workpiece axis runout during rotation

Φ13 mm
Drilling Dia

<0.25 mm
TIR

B16

* Milling cutter sold separately.

Figure 7: Chuck and Drilling Diameter

6. MAINTENANCE

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

- **Cleaning:** Keep the machine clean and free of dust and debris. Use a brush or vacuum to remove sawdust.
- **Lubrication:** Periodically lubricate moving parts, such as the column and quill, with light machine oil.

- **Belt Inspection:** Check the drive belt for wear, cracks, or tension. Replace if necessary and ensure proper tension for optimal speed transfer.
- **Chuck Maintenance:** Keep the chuck jaws clean and free of rust. Apply a small amount of lubricant if they become stiff.
- **Fastener Check:** Regularly inspect all nuts, bolts, and screws for tightness. Tighten any loose fasteners.
- **Power Cord Inspection:** Check the power cord for any damage. Do not use the tool if the cord is frayed or damaged.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your drill press.

Problem	Possible Cause	Solution
Motor does not start	No power supply; Faulty switch; Overload protection tripped.	Check power connection; Inspect switch; Reset circuit breaker.
Excessive vibration or noise	Loose components; Worn belt; Unbalanced drill bit.	Tighten all fasteners; Check and replace belt; Ensure drill bit is properly installed and not bent.
Drill bit not cutting efficiently	Dull drill bit; Incorrect speed for material; Insufficient feed pressure.	Replace or sharpen drill bit; Adjust speed according to material; Apply steady, appropriate feed pressure.
Workpiece moves during drilling	Workpiece not securely clamped.	Always use clamps or a drill press vise to secure the workpiece.

If you encounter issues not listed here or if solutions do not resolve the problem, please contact VEVOR customer support.

8. SPECIFICATIONS

Feature	Specification
Brand	VEVOR
Model Number	DP2501A
Motor Power	6.2A Induction Motor (550 Watts)
Voltage	220 Volts
Adjustable Speeds	5 speeds (610/940/1500/2150/2800 RPM)
Maximum Drilling Diameter	1/2 inch (13 mm)
Spindle Travel	2 inches
Worktable Tilt	0-45° Left/Right
Special Features	LED Work Light, X-Ray Positioning, Variable Speed
Product Dimensions	49.53 x 24.89 x 73.91 cm (19.5 x 9.8 x 29.1 inches)
Item Weight	23 kg (50.7 lbs)



Item Model Number :

DP25013B

Chuck Capacity :

≤ 1/2"

Swing :

10 in / 254 mm

Net Weight :

46.3 lbs / 21kg

Spindle Speed :

550/950/1500/2000/2500 RPM

Product Dimensions:

18.90×11.81×29.33 in /

480×300×745 mm

Main Material : **Q235, HT150**

Figure 8: Product Dimensions and Key Specifications

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the warranty card included with your product or visit the official VEVOR website. Keep your purchase receipt as proof of purchase.

Customer Support: For assistance, please contact VEVOR customer service through their official channels. Details can typically be found on the product packaging or the VEVOR brand website.

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