

Chicago Electric Power Tools USATM

1/2 in. Heavy Duty Variable Speed Reversible Hammer Drill Instruction Manual

Brand: Chicago Electric Power Tools

Model: USATM (ASIN: B012COEKX4)

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1. SAFETY INFORMATION

Always read and understand all safety warnings, instructions, illustrations, and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

General Power Tool Safety Warnings

- **Work Area Safety:** Keep 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. Power tools create sparks which may ignite the dust or fumes.
- **Electrical Safety:** Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Personal Safety:** Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- **Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed. Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool 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.

2. COMPONENTS AND FEATURES

Familiarize yourself with the various parts of your Chicago Electric Power Tools Hammer Drill before operation.



Figure 2.1: Overview of the 1/2 in. Heavy Duty Variable Speed Reversible Hammer Drill. This image shows the complete drill unit, highlighting its red and black body, the chuck, auxiliary handle, and depth rod.

1. **Chuck:** Holds drill bits securely. This model features a 1/2 inch chuck.
2. **Auxiliary Handle:** Provides additional grip and control during operation.
3. **Depth Rod:** Used to set the drilling depth for consistent results.
4. **Mode Selector Switch:** Allows switching between drill mode and hammer drill mode.
5. **Variable Speed Trigger:** Controls the drilling speed based on pressure applied.
6. **Forward/Reverse Switch:** Changes the rotation direction of the chuck.
7. **Lock-on Button:** For continuous operation without holding the trigger.

3. SETUP AND ASSEMBLY

3.1 Attaching the Auxiliary Handle

The auxiliary handle can be rotated 360 degrees around the chuck housing for optimal positioning. Loosen the handle by twisting it counter-clockwise, position it as desired, and then tighten by twisting clockwise until secure.

3.2 Installing the Depth Rod

Insert the depth rod through the hole in the auxiliary handle. Adjust its position to the desired drilling depth. The depth rod allows for precise, repeatable drilling depths.

3.3 Inserting and Removing Drill Bits

1. Ensure the drill is unplugged from the power source.
2. Open the chuck jaws by rotating the chuck key (if applicable) or by hand (if keyless chuck) counter-clockwise.

3. Insert the drill bit fully into the chuck.
4. Tighten the chuck jaws by rotating clockwise until the bit is firmly secured. For keyed chucks, use the chuck key to ensure maximum grip.
5. To remove, reverse the tightening process.

4. OPERATING INSTRUCTIONS

4.1 Selecting Operating Mode

This hammer drill offers two modes: drilling and hammer drilling. Use the mode selector switch located on the side of the drill to choose the appropriate mode:

- **Drill Mode:** For drilling into wood, metal, plastics, and other non-masonry materials.
- **Hammer Drill Mode:** For drilling into masonry, concrete, and brick. This mode combines rotary action with a hammering action.

4.2 Variable Speed Control

The drill features a variable speed trigger. The speed of rotation increases as you apply more pressure to the trigger. This allows for precise control, especially when starting a hole or working with different materials.

4.3 Forward/Reverse Rotation

The forward/reverse switch, typically located above the trigger, controls the direction of rotation. Push the switch to the left for forward (clockwise) rotation for drilling and driving screws. Push it to the right for reverse (counter-clockwise) rotation for removing screws or freeing jammed bits.

4.4 Using the Lock-on Button

For extended periods of drilling, you can engage the lock-on button. Press the trigger fully, then press the lock-on button. Release the trigger, and the drill will continue to operate. To disengage, press the trigger fully again and release.

5. MAINTENANCE

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

- **Cleaning:** After each use, clean the tool's ventilation openings and housing with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Chuck Maintenance:** Periodically clean the chuck jaws to ensure proper grip on drill bits. Apply a small amount of light machine oil to the chuck jaws if they become stiff.
- **Carbon Brushes:** This tool uses carbon brushes. If the motor sparks excessively or the tool loses power, the carbon brushes may need replacement. This should be performed by a qualified service technician.
- **Storage:** Store the tool in a dry, secure place out of reach of children. Protect it from direct sunlight and extreme temperatures.
- **Cord Inspection:** Regularly inspect the power cord for any damage, cuts, or fraying. If damaged, have it repaired by a qualified professional to prevent electrical hazards.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Drill does not start.	No power supply; Faulty power cord; Trigger not pressed.	Check power outlet and circuit breaker; Inspect power cord for damage; Ensure trigger is fully depressed.
Loss of power during operation.	Overload; Worn carbon brushes.	Reduce pressure on the tool; Allow tool to cool; Have carbon brushes inspected/replaced by a service technician.
Excessive sparking from motor.	Worn carbon brushes; Dirty commutator.	Have carbon brushes and commutator inspected by a service technician.
Drill bit slips in chuck.	Chuck not tightened sufficiently; Damaged chuck jaws; Dirty bit shank.	Re-tighten chuck firmly; Clean bit shank; If problem persists, chuck may need replacement.

7. SPECIFICATIONS

Feature	Detail
Model	USATM (ASIN: B012COEKX4)
Chuck Size	0.5 Inches (1/2 inch)
Power	850 Watts
Drill Type	Hammer Drill
Special Features	Variable Speed, Reversible
Material	Metal
Manufacturer	Chicago Electric Power Tools

8. WARRANTY AND SUPPORT

Warranty Information

Specific warranty details for Chicago Electric Power Tools products are typically provided with the product packaging or can be obtained by contacting the manufacturer directly. Please retain your proof of purchase for any warranty claims.

Customer Support

For technical assistance, parts, or service, please contact Chicago Electric Power Tools customer support. Refer to the contact information provided in your product packaging or visit the official Chicago Electric Power Tools website for the most current support options.

Note: Protection plans may be available for purchase separately through retailers. These plans offer extended coverage beyond the manufacturer's warranty. Refer to the specific terms and conditions of any purchased protection plan.



