

Specification

Vevor

JBLJ11 Magnetic Drill



Specification

Serial No.:

Model: **Magnetic drilling machine**

Motor rated power: **1100W**

No load speed: **580rpm**

Rotating direction: **clockwise**

Arbor bore: **19.05mm (3/8)dia.**

Cooling supply: **Internal Cooling**

Voltage: **AC 110V/220V**

Frequency Range: **50 ~ 60Hz**

Magnet adhesion: **12000N**

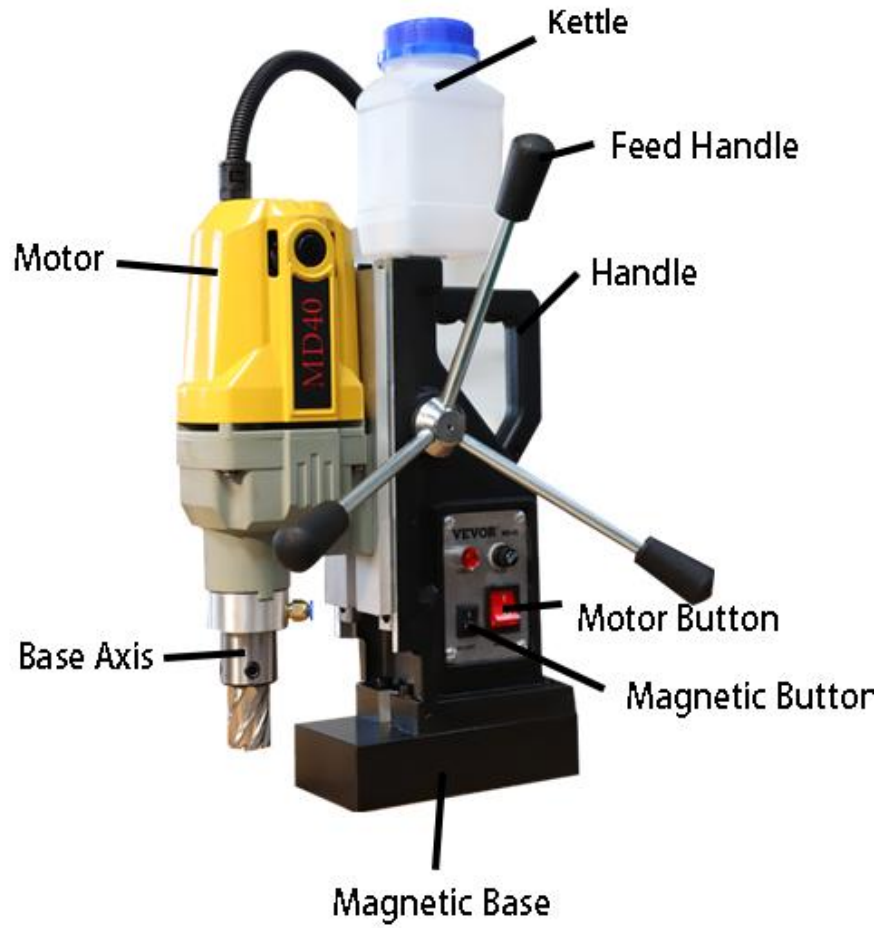
Max.Cutting dia.(annular cutter): **35mm (1-5/16")**

Max cutting depth : **50mm (2 ")**

Stroke : **150mm**

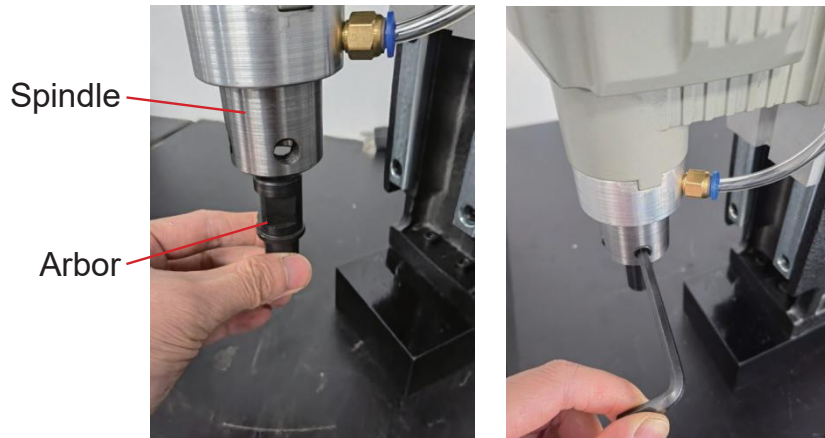
Weight: **11kg**

二、Parts Description

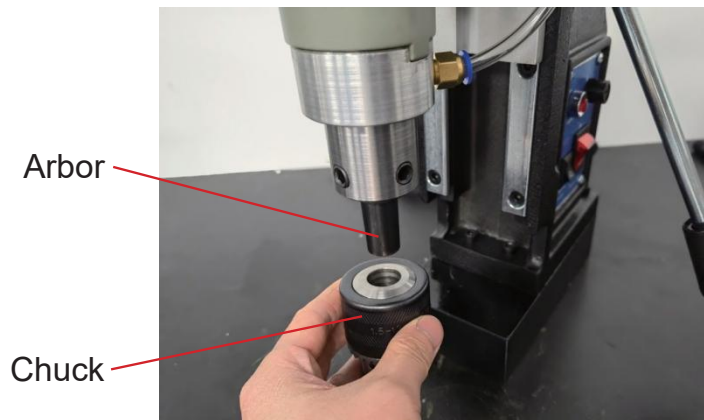


Twist Drill Bit Installation

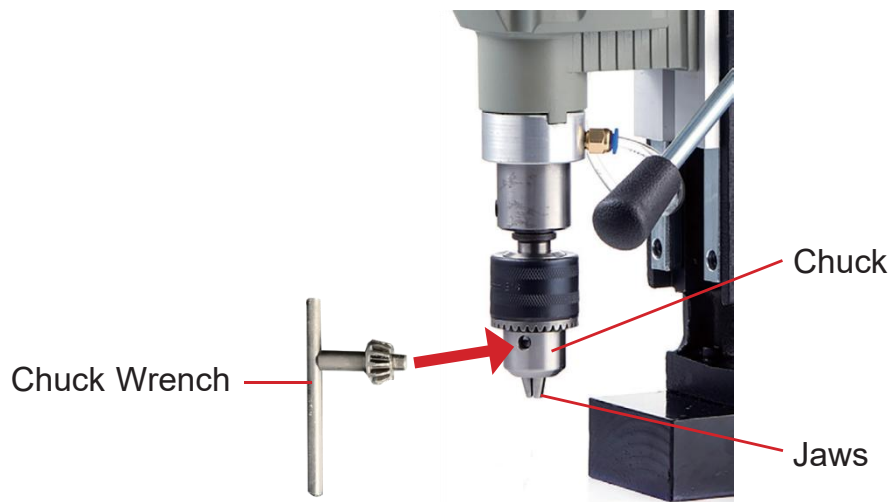
1. Insert the arbor (D) into the spindle and secure it by attaching the set screws (G) and tightening them with the M5 hex wrench (I).




2. Slide the chuck (C) onto the arbor until it is locked into place.



3. Loosen the chuck's jaws by inserting the chuck wrench (E) into either hole on the chuck and turning it counterclockwise.

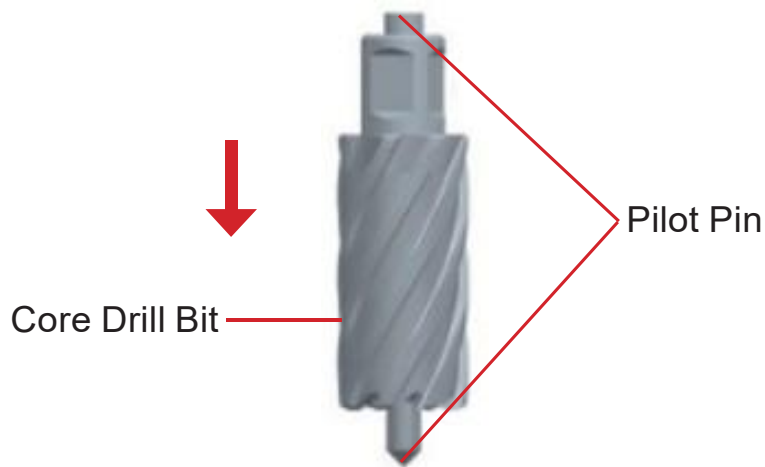


4. Mount your twist drill bit (not included) into the chuck and turn the chuck wrench clockwise until the bit is locked in place.

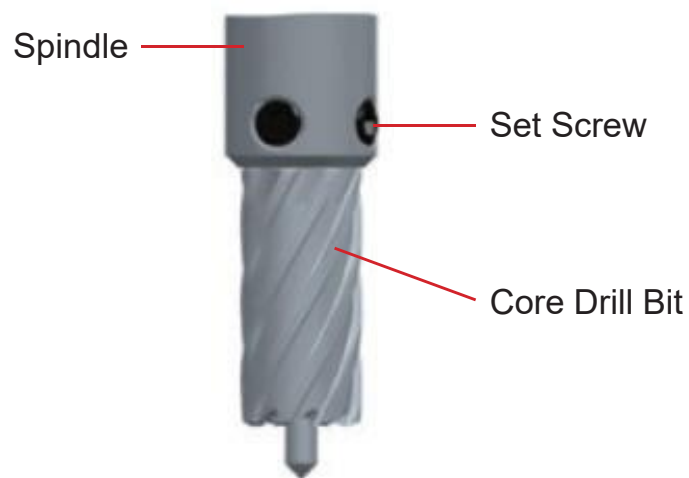
 **ALWAYS** remove adjustment wrenches before use.

Annular Cutter/Core Drill Bit Installation

1. Insert the pilot pin (H) into the top hole of your core drill bit (not included).



2. Fit the bit onto the spindle, locking it in place by attaching the set screws (G) and tightening them with the M5 hex wrench (I).



 **ALWAYS** remove adjustment wrenches before use.

三、 Operation Instructions

WARNING

Warning! Before using this device, be sure to read all the safety regulations and instructions carefully to avoid fire, electric shock, or serious injury. Follow these safety measures strictly!

Meanwhile must follow workplace safety regulations, follow the relevant work safety regulations of all countries.

Personal Protection

Operators should wear protective glasses, earmuffs, insulated shoes, and trouser legs must be tightened. Operators with long hair must wear a working cap. It is forbidden to wear loose-fitting clothes, operate equipment with feet, and remove the swarf with hands directly. It is also forbidden to take apart the machine and run maintenance on the circuit board without permission.

Work place

- 1. Keep the working area clean at all times, messy work environments can cause accidents.**
- 2. Don' t use drill machine in rain or wet environment, there is a risk of electrical leakage.**
- 3. Use drill machine in a bright environment, not in a dark environment.**
- 4. Don' t use drill machine near flammable material. The drill machine may produce sparks during working, which may cause a fire or explosion.**
- 5. Keep the drill machine away from children when working.**
- 6. Except for the operator, others must not be close to the work area while the drill machine is running.**

Safety

- 1. Before starting, ensure that the power cord and plug are in good condition. If damage occurs, stop and replace parts immediately.**
- 2. Ensure that the power supply is in line with the requirements of the equipment, and that safetyprotection measures such as grounding and leakage are provided.**
- 3. The drilling tools must strictly follow the dimensions specified in this manual. The drilling work-piece shall be made of material (such as an iron plate) that can be magnetized and adsorbed.**

The surface shall be smooth, and the thickness shall be between 10mm-75mm to ensure reliable adsorption of the equipment.

4. A steel plate with less than a 10mm thickness cannot provide complete compatibility with the rated magnetic adsorption. It is required to check the suction condition after magnetic adsorption and confirm the adsorption before operation.
5. When the work-piece thickness is less than 10mm it is recommended to have one support iron plate with a thickness greater than 10mm added at the bottom of the work-piece. In order to improve the adsorption reliability of the magnetic base, the area of the support iron plate must be greater than the area of the magnetic base; improper use of the support plate may lead to accidents. If the support plate is too thin or insufficient in area, the drill machine will become loose during adsorption, which will lead to accidents and serious faults.
6. Do not press too hard on the feed when cutting in order to prevent overload operation for the magnetic drill, which will shorten the life of the magnetic drill. When drilling always pay attention to the condition of the magnetic adsorption. When the magnetic adsorption instability caused by excessive feed force is unstable, drilling operations must be stopped immediately.
7. When the magnetic drill starts up or is shut down, the operating sequence of the motor and magnetic switch should comply strictly.
8. The magnetic base cannot operate with a full load continuously. Continuous operation will affect the lifetime of the magnetic base, and the temperature of the magnetic seat will increase, leading to a potential fire. When the magnetic base produces a high temperature, do not touch it. It will cause serious burns if touched. Turn the switch to the off position and pull the plug out of the power supply when the magnetic base is not in use.
9. The motor cannot be continuously overloaded for more than 30 minutes, or it will generate extreme heat, which will cause a fire; turn the switch to the off position when the motor is not in use.

The equipment must be cut off before replacing the drill bit or adding coolant. In case of drilling blockage, the motor power shall be turned off immediately, but the magnetic base power supply will continue to run. It is forbidden to shut down the power supply of the magnetic base directly during drilling operations to prevent injuries to personnel and equipment caused by the sudden loss of magnetic force of the magnetic base.

10. When the magnetic drilling machine is suspended while(horizontal or inverted) operating, it must be fixed with the device attached to the equipment, to prevent the equipment from falling down due to the sudden

loss of power of the magnetic base .When drilling laterally or upside-down in a magnetic base, a reasonable cooling method shall be selected. A liquid cooling method shall not be used for cooling. Liquids are likely to infiltrate into the equipment to cause damage or electricity leakage. A mist spray cooling is recommended.

11. Only parts and tools provided or approved by the supplier can be used. Even if other accessories or tools can be installed on the equipment, safety is not guaranteed.
12. When drilling, you must pay attention to the hidden wiring, the gas pipe, and the water pipe. When it is possible to drill down to a hidden wire or a live wire, insulating plastic or a rubber handle grip must be held.
13. Do not remove the drill bit, arbor, replace gears, or touch with the bare hand if the spindle and tool are still rotating.
14. After drilling, do not remove iron filings by hand to prevent injury, even if the equipment has stopped working.
15. When using the magnetic drill, welding operations are not allowed on the same workpiece.
16. When changing working locations, do not pull the bellows and power cable. Handle the machine by carrying from the handle.
17. After an operation, shut off the power, then unplug. Avoid damage to the equipment caused by electricity.
18. The magnetic base will produce magnetic fields once starting the equipment. The field may affect devices, such as watches, mobile phones, pacemakers, etc.

Cleaning and Maintenance

1. Inspect regularly whether the bolts of the magnetic drill are loose or have fallen off. Make sure the gap of the spindle is not too large, the power cable is in good condition, and the gap of slideway is not too large. Maintenance is important.
2. The spark increases after the carbon brush is worn, please replace it by a

- professional according to the wear condition of the carbon brush.
3. After three months of normal working conditions, change the lubricating grease in gear box by a professional or technical personnel. Make sure all the parts are fully lubricated.
 4. Maintenance is made in our after-sales service department or designated dealer. Self-disassembly for maintenance issues may reduce the life of the machine if done incorrectly.
 5. Clean the magnetic drill after working, scrub the slideway, and apply lubricating oil for protection.
 6. Wear goggles and protective gloves when cleaning with compressed air, and protect other personnel in the work area.
 7. Turn off the machine and pull the power plug out of the socket before carrying out maintenance or cleaning.

Electrical aspects of maintenance, inspection, and repair can only be completed by a qualified electrician according to their respective country's effective rules for processing, inspection. Maintenance of circuit boards must be completed without a power supply, averting electrical accidents.

Environmental protection and waste disposal

1. Packaging material disposal

Packaging protects the drill machine from shipping damage;

Packaging materials are selected based on environmental and waste disposal standards, so they can be recycled. Recyclable packaging materials help to save raw materials and reduce generated waste. When packing materials are no longer needed, they can be disposed according to local regulations.

2. Old electrical equipment disposal

The product should be processed in accordance with EC Directive 2002/96/EC-WEEE (Waste Electrical and Electronic Equipment). If you have any questions, please contact the local department for waste disposal. Grease can be disposed of in accordance to the lubricant manufacturer's instructions.

3. Grease disposal

According to the lubricant manufacturers disposal instructions.

Magnetic suction indication

When the magnetic control button is opened, magnetic suction is about 70% of the normal working state. This is called a magnetic half suction. After pressing the control button of magnetic base, press the motor control button, then the drill machine will be in a working state. The magnetic suction at its peak performance is called magnetic full suction. The advantages of magnetic half suction and full suction are to extend the service life of the machine and improve security.

Drilling Operation Tips

- 1. Locate with a pilot pin first within the center position marked or marker.**
- 2. To start drilling, you must press the annular cutter slowly, allowing the cutter to touch the steel plate carefully. The feed rate should be reduced by 1/3 when the completion of a drilled hole is near.**

The annular cutter should always be in the cooling state during cutting. The best cooling method is with cooling device. Flow of the coolant should not be less than 47cc/min. For those materials which create a large amount of fine powder, such as cast iron and cast copper, coolant can not be used. Compressed air can be used instead for chip removal.

- 3. Pay attention to whether chips are winding. Withdraw the cutter and remove the chip to avoid cutter damage due to squeezing.**
- 4. In the case of the slug sticking in the inner bore, adjust the bit blade by tapping cutter body with a metalloid bar till the slug drops off. Never use hard objects to tap the edges of teeth to prevent damage to the sharpening edges.**
- 5. Slug sticking occurs due to the following :**

rouble spots	Solution
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Edges of teeth dull or damage	Replace with a new cutter
Gap of slideway is too large	Reduce gap of slideway
Cooling is not sufficient	Increase the flow of coolant
Feeding too large or too hard when drilling through steel plates	Slow down
Spring of arbor breaks	Replace new spring

- 6. In order to avoid the influence of magnetic suction, clear out the iron filings and clutter at the bottom of the magnetic base before drilling.**