

VEVOR[®]

TOUGH TOOLS, HALF PRICE

Technical Support and E-Warranty Certificate www.vevor.com/support

MAGNETIC BASE DRILL

Model: ZT-40H/ZT-45H/MD-50/MDP-50

We continue to be committed to provide you tools with competitive price.

"Save Half", "Half Price" or any other similar expressions used by us only represents an estimate of savings you might benefit from buying certain tools with us compared to the major top brands and does not necessarily mean to cover all categories of tools offered by us. You are kindly reminded to verify carefully when you are placing an order with us if you are actually saving half in comparison with the top major brands.

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MAGNETIC BASE DRILL USER MANUAL

MODEL: ZT-40H/ZT-45H/MD-50/MDP-50



NOTE: The buttons on the control panel of some machine models may be different. Please see the real product for detailed information.

NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us:

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This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves a clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.



DESCRIPTION OF THE SYMBOLS

The symbols used in this manual are intended to alert you of the possible risks. Please fully read the safety signs and instructions below. The warnings themselves do not prevent the risks and can not be a substitute for proper methods of avoiding accidents.



This symbol, placed before a safety comment, indicates a kind of precaution, warning, or danger. Ignoring this warning may lead to an accident. To reduce the risk of injury, fire, or electrocution, please always follow the recommendations shown below.



WARNING - To reduce the risk of injury, users must read the instruction manual carefully.

Please refer to the appropriate section in this user manual before any operation.



WARNING: Be sure to wear eye protectors, dust masks, and gloves when using this product.



This product is subject to the provision of European Directive 2012/19/EC. The symbol showing a crossed-out wheeled bin indicates that the product requires separate refuse collection in the European Union. This symbol applies to the product and all accessories marked with this symbol. Products marked as such may not be discarded with normal domestic waste but must be taken to a collection point for recycling electrical and electronic devices.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

SAFETY INSTRUCTIONS



WARNING: Read 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.

Save all warnings and instructions for future reference.



General Power Tool Safety Warnings - Work area safety

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) 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.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- d) Before work to tie the cuffs, women need to wear a good woman hat, long hair hidden in the hat, is strictly prohibited to wear gloves. When the construction is completed, the switch must be turned off before leaving.



General Power Tool Safety Warnings - Electrical safety

- a) 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.

- b) Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) 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. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply. Use of an GFCI reduces the risk of electric shock.



General Power Tool Safety Warnings - Personal safety

- a) 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.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.
- I) This product is not a toy. Keep it out of reach of children.
- J) Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
- K) Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
- L) When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.
- M) Do not leave the tool unattended when the Battery Pack is connected. Turn off the tool, and remove the Battery Pack before leaving.
- N) People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
- O) The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator

Power tool use and care

- a) 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.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

c) 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. Such preventive safety measures reduce the risk of starting the power tool accidentally.

d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

e) Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

h) Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

i) Please confirm the number of voltage volts before use. The working voltage is not more than $\pm 5\%$. If it is more than that, it will cause motor burning and leakage accidents.

j) During construction, please pay attention to avoid water entering the motor or blocking the ventilation hole, so as not to reduce the heat dissipation performance of the motor and cause the motor to burn down.

k) In the steel plate construction, please pay attention to the safety of the lower layer of personnel and goods, iron beam and column drilling, pay attention to the safety of the structure of the building.

L) In suspension operation, the safety belt must be tightly tied and the magnetic drill fixed to prevent sudden power failure or power failure caused by accidents.

M) Do not cut the power cord or change the plug yourself. This will cause the machine to burn out.

Service

- a) 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.
- b) In any case, it should be started in no-load state. It is forbidden to start with load, so as to avoid damage to the machine. Please pay attention to the stability of the magnetic drill when working at high altitude, so as to prevent the machine from falling down.
- c) Ensure that the ground cable is grounded reliably.
- d) When moving, the magnetic drill should be lifted to prevent damage to the magnetic base.
- e) In the maintenance must use the original parts, in order to make the machine to achieve the best use state.
- f) Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact VEVOR for a replacement.



Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

- a. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
- b. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
- c. Wear suitable gloves to reduce the vibration effects on the use
- d. Use tools with the lowest vibration when there is a choice.
- e. Include vibration-free periods each day of work.
- f. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.

g. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



Grounding Safety

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING: check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the charger. Do not use the charger if the power cord or plug is damaged. if damaged, have it repaired by a service facility before use. if the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

MODEL AND PARAMETERS

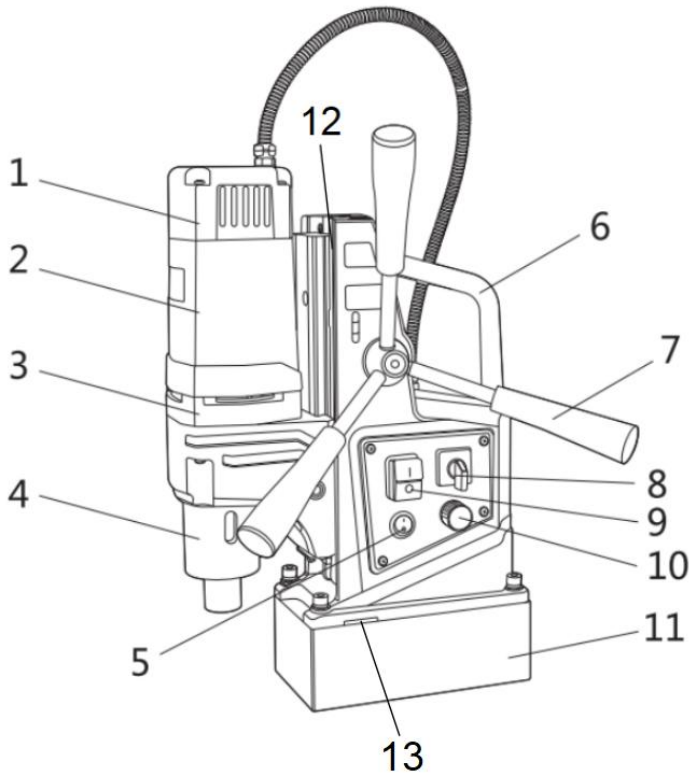
INPUT: AC 230V 50Hz(EUR/AUS)

Model	ZT-40H	ZT-45H	MD-50	MDP-50
Hole diameter (hollow drill)(mm)	Φ40mm	Φ40mm	Φ50mm	Φ50mm
Fried dough twist drill diameter(mm)	Φ3-Φ16	Φ3-Φ16	Φ3-Φ16	Φ3-Φ16
Tapping diameter(mm)	/	3-16	3-16	/
Drilling depth(mm)	50	50	50	50
Magnetic attraction(N)	12500	12500	13000	12800
Speed(r/min)	850	0-830r/min (FWD) 0-800r/min (REV)	0-570	0-850r/min (FWD) 0-800r/min (REV)
Trip(mm)	220	220	210	220
Input	AC 230V 50Hz(EUR/AUS)			
Power(W)	1450	1450	1600	1450
Fuse(A)	15			
Direction of rotation	Forward	Forward/ Reverse	Forward	Forward/ Reverse

INPUT: AC 120V 60Hz(US)

Model	ZT-40H	ZT-45H	MD-50	MDP-50
Hole diameter (hollow drill)(mm)	Φ40mm	Φ40mm	Φ50mm	Φ50mm
Fried dough twist drill diameter(mm)	Φ3-Φ16	Φ3-Φ16	Φ3-Φ16	Φ3-Φ16
Tapping diameter(mm)	/	3-16	/	3-16
Drilling depth(mm)	50	50	50	50
Magnetic attraction(N)	12500	12500	13000	12800
Speed(r/min)	850	0-800r/min (FWD) 0-770r/min (REV)	0-570	0-800r/min (FWD) 0-750r/min (REV)
Trip(mm)	220	220	210	220
Input	AC 120V 60Hz(US)			
Power(W)	1450	1450	1600	1450
Fuse(A)	15			
Direction of rotation	Forward	Forward/ Reverse	Forward	Forward/ Reverse

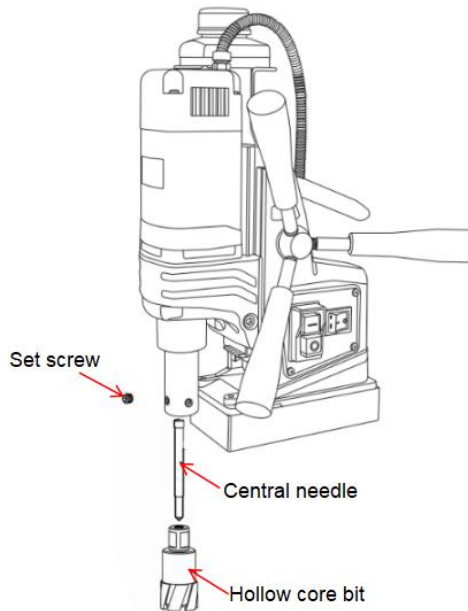
STRUCTURE DIAGRAM



The buttons on the control panel of some machine models may be different. Please see the real product for detailed information.

- | | |
|--------------------------|---------------------------|
| 1. Rear cover | 2. Chassis |
| 3. Middle cover | 4. Gear box |
| 5. Electromagnet switch | 6. Handle |
| 7. Control Rod | 8. Forward/reverse switch |
| 9. Power switch | 10. Speed regulating knob |
| 11. Electromagnetic Base | 12. Track |
| 13. Seat belt sling hole | |

OPERATION AND USE



1. The drill bit must be sharp. When installing the hollow drill, insert the central needle into the hollow drill, install the hollow drill on the output shaft, and finally, tighten the fixing screw to secure the hollow drill.
2. Place the magnetic drill near the required drilling position, plug in the power plug, align the drill bit with the machining position, and then turn on the switch of the electromagnet so that the electromagnet can be absorbed on the surface of the magnetic materials such as steel. (plate thickness more than 15mm)
(Pay attention to selecting appropriate adsorption materials and ensure that there is no debris on the adsorption surface, check whether the magnetic force is normal).
3. The machine should be fastened with a safety belt when working on the side or top.
4. Thread one end of the safety belt into the handle hole of the frame, tie the other end to the strong frame, and then buckle into the fasteners
(Try to pull with your hand, it should not be loose and displacement).

5. Turn on the power switch to check whether the drill bit is beating and the sound is stable. If everything is normal, open the water valve first so that the cutting fluid in the oil can flow out, and then turn the handle to feed

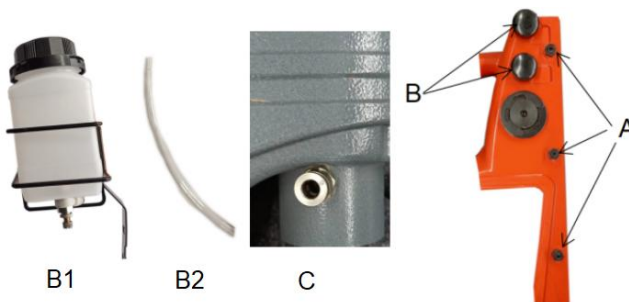
(Note: Do not open the water valve when working on the side and top position)

6. Feed should be slow at first. Do not exert too much in case of overload.

7. If the motor suddenly stops or gets stuck due to a fault, the drill control switch 9 must be turned off immediately (Note: do not turn off the electromagnet switch 5). After continuous use for 2-3 hours, you need to rest to prevent the electromagnetic seat from burning out due to overheating.

8. When the carbon brush is worn out, please replace it in time (both of them should be replaced at the same time).

COOLING DOWN AND ADJUSTMENT OF THE TRACK



1. Fix B1 at B, then connect B2 to B1 and C.

2. Turn the joystick to determine whether the tightness of the track meets the drilling requirements. If the tightness is not ideal, you can adjust it with the open wrench and the hex wrench in the attachment.

a) Loosen the hex nut at place A with an open wrench.

b) Use the hex wrench to adjust the set screw at A and turn the joystick 7 simultaneously to feel whether the tightness of the track reaches the ideal state of drilling.

c) After adjustment, tighten the hex nut at A with the open-end wrench.

Note: The tightness of the track has been adjusted before leaving the factory. If there has been no strong vibration, fall, and other conditions, please do not adjust.

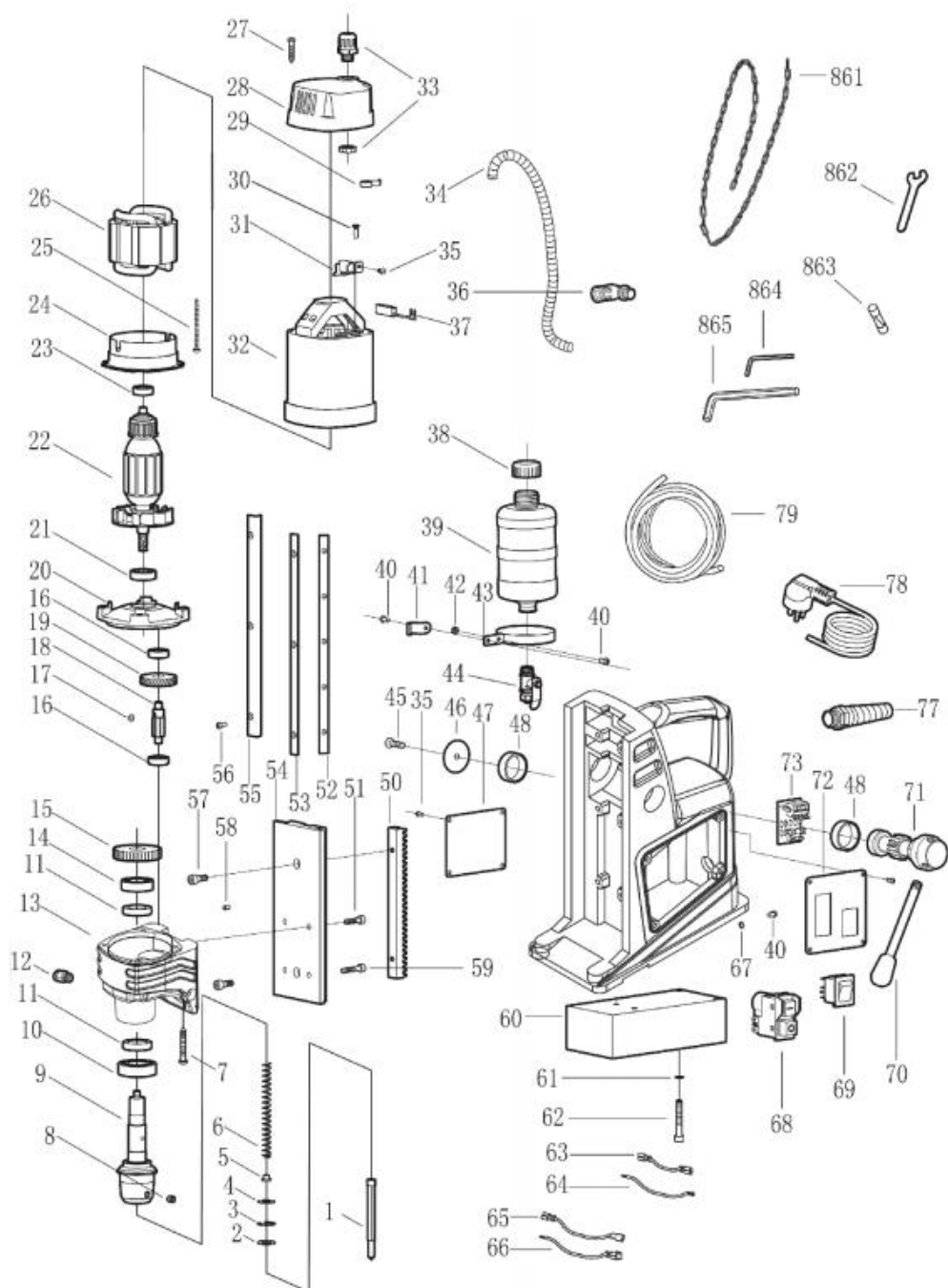
TROUBLE SHOOTING INSTRUCTION

Problem	Reason	Solution
Magnetic holder has no suction.	Poor switch contact.	Repair switch.
	The power is off.	Repairing the power
	The fuse is blown out.	Replace the fuse
	Electromagnet short circuit or burn out.	Repair or replace the magnetic base.
	It is not adsorbed on steel parts.	Change or thicken the adsorption surface (thickness > 15mm).
The machine won't work after the power is on.	Poor switch contact.	Repair switch.
	Loose plug.	Connecting the power
	The brush does not contact the commutator.	Replace the brush.
Magnetic seat suction is weak.	The adsorbed workpiece is too thin.	Change or thicken the adsorption surface (thickness > 15mm).
	Small adsorbable surface.	Change the adsorption surface or temporarily weld the thick adsorption
Elliptical holes appear in the drilling holes.	The vibration caused the fastener to loosen.	Tighten the fastener after correcting the verticality.
	The drill cuts only on one	Regrinding bit.
	There is debris on the adsorption surface.	Remove clutter.

MAINTENANCE AND STORAGE

NOTE: Please remove the plug before maintenance.

1. After each use, clean the bottom of the magnetic seat drill and keep it properly.
2. Please butter the track in time when the slide is not smooth.
3. Please check the electrical protection device regularly.
4. Whether grounding is reliable.
5. Please check in time during the rainy season.



COMPONENT COMPARISON TABLE

No.	Name	No.	Name	No.	Name
1	Central needle	29	Coil spring	57	Bolt M6 x 6
2	Rubber pad	30	Tapping screw ST2.9 x 9.5	58	Cylindrical pin x 10
3	Elastic retaining ring 19	31	Brush holder component	59	Bolt M5x25
4	Gasket	32	Nylon cable fixing head component	60	Electric magnet
5	Spring plug	33	Hose	61	Spring gasket 6
6	Spring	34	Bolt m4x6	62	Bolt M6 x 40
7	Tapping screw ST4.8 x 40	35	Elbow cable retainer component	63	Connect wire 2
8	Hexagon socket screw M8 x 8	36	Carbon brush	64	Connect wire 3
9	Output axis	37	Oil can cover	65	Connect wire 1
10	Bearing 6004	38	Oil can	66	Connect wire 4
11	Seal ring	39	Bolt M4x10	67	gasket 4
12	APC connector R1/8	40	Cable fixing plate	68	Electromagnetic switch
13	Reduction gearbox	41	Nut M4	69	Swing plate switch
14	Bearing 6003	42	Oil can retaining ring	70	Rod component
15	4# gear	43	Water valve component G1/4	71	Rack shaft
16	Bearing 608	44	Bolt M6 x 20	72	Switch fixing plate
17	Flat key 4 x 4 x 6	45	Gasket	73	Circuit board
18	3# gear shaft	46	Name plate	74	Bolt M5 x 16
19	2# gear	47	Shaft ring	75	Nut M5

20	Middle cover	48	Screw-pad combination M6x16	76	Base
21	Bearing 6001	49	Rack	77	Screw cable fixing head
22	Rotor	50	Bolt M5 x 20	78	Cable connector plug
23	Bearing 608	51	Track regulating bar	79	PU hose
24	Wind shield ring	52	Track bar A	861	Safety Belt
25	Tapping screw ST4 x 52	53	Guide rail plate	862	Open spanner 8mm
26	Stator	54	Track bar B	863	Fuse
27	Tapping screw ST4.2 x 25	55	Tapping screw ST2.9 x 9.5	864	Hexagonal open spanner 2.5mm
28	Rear cover	56	Bolt M3 x 6	865	Hexagonal open spanner 4mm

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