

OPERATING INSTRUCTION -14

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Operation Manual

WARNING

To prevent electric shock or fire, please strictly abide by the procedures in the operation manual.

The machine only for the authorized persons, please do not let other people to operate. If any violation of the instructions operation and cause personal injury or machine damage, our company disclaim all responsibility.

The machine can be only maintained by the people who has the certification.

THANKS TO THE BUYER

Thanks for buying the series of magnetic drill machine of . Please read the operation manual and pay attention to the safety precaution.

The right operation, will make you fully feel our products superior performance.

Please put this manual in a safe place for future reference.

ABOUT THIS MANUAL

The machine model of the description in this manual:

SCY: 1300/1300E/1300RE/1600/1600E/1600RE	Magnetic Drill
SCY: 2300/2300E/2300RE/2800/2800E/2800RE	Magnetic Drill
SCY: 3200/3200C/3200RC/3200RTC/3800/3800C/3800RC/3800RTC	3-Phase Magnetic Drill
SCY: 4900/4900C/4900RC/4900RTC/6000/6000C/6000RC/6000RTC	3-Phase Magnetic Drill
SCY: 8000/8000C/8000RC/8000RTC/1000/1000C/1000RC/1000RTC	3-Phase Magnetic Drill

Confirm the machine model according to the nameplate.



DESCRIPTIONS OF PRODUCTS

Magnetic drill is a kind of electric tool for adhering and drilling on the horizontal level, side face and top face, and widely used in the building, bridge building, and ship building industries and so on. You can use the magnetic drill when you can not use drill press and electric hand drill to drill huge steel workpieces or in field operation. It's very convenient to use, flexible, can reduce labor intensity, improve the machining precision and work efficiency.

CAUTIONS







1. Please read the manual carefully before use, to understand the magnetic base drill structure; electromagnetic sucker, electric drill and transmission functions.
2. Before installing or remove the drill must confirm the motor switch is closed and unplug.
3. Using a drill bit after clamping, key wrench must be removed, while the drill must be sharp, for Morse taper shank drill should pay attention to the flat iron tail at the cone sleeve waist groove insert cone sleeve. Remove the drill, the inclined flat iron is inserted on the oblique iron just bit dropping hammer sleeve waist groove.
4. And its operation must be put in the fuselage behind the cable, away from the drill bit
5. In the switching power supply, electric and magnetic switch must be in the off position
6. Drilling machine must be used when using engine coolant. The use of cooling liquid (soap) according to the ratio of watered, absolutely can not direct use water cooling. Otherwise very easy to damage, and the main internal rust on the drill bit can't get it out. No internal machine water, otherwise it will burn the circuit board.
7. Such as the use of the stepless speed regulation, models of constant power overload protection, the machine during use motor suddenly stop functioning, then in the function of overload protection device, the steps are as follows: A. turn off the power switch, paused for a few minutes; B. weight of the plug, then open the motor.
8. The use of magnetic base drill, must wear a seat belt buckle.
9. No rough operation personnel, feed can not handle in order to work fast and pressed down the machine feed, so lossy bit and machine
10. Non-magnetic materials can not drill with magnetic base, if the non-magnetic material punching need to choose the magnetic base drill with sucker.
11. Cannot use at the same time, electric welding machine and magnetic base drill on the same piece of steel plate, so that the operating from electric shock danger.



ELECTRICAL SAFETY

Tool before connecting power, using the socket must be able to fit the plug machine. The 380V model to determine the fire and. Line the correct docking, power supply socket with the need of professionals to complete. Do not arbitrarily change the plug, adapter plugs can't pick. The electric tool wire used together.

SAFETY INSTRUCTIONS

Warning labels and/or other labels on the machine must be replaced when they were removed.

	<p>Do not operate the machine at insufficient lighting conditions. Do not operate the machine outdoors. Do not operate the machine when you are tired, when your concentration is impaired, and/or under the influence of drugs, medication or alcohol.</p>
	<p>Climbing onto the machine is forbidden! Heavy injuries by falling down or by tilting of the machine are possible.</p>
	<p>The machine shall be used only by trained persons. Non authorized persons, especially children, shall be kept away from the work area.</p>
  	<p>Do not wear loose clothing, long hair openly or loose jewellery like neck-laces etc. when operating the machine They might be caught by rotating parts and cause serious injuries.</p>

	<p>Use proper safety clothing and devices when operating the machine (, safety goggles, ear protectors, safety shoes ...)! Do not wear safety gloves for oper-ating because they decrease the working accuracy and they might be pulled into the saw blade.</p>
	<p>Before any maintenance you have to disconnect the panel saw from the power source. Never use the plugged cable for transporting or manipulating the machine.</p>

INSTRUCTIONS

1. Plug the power plug, the drill bit aim at processing position, make the magnetic switch is opened, so that the magnetic is adsorbed on the surface of steel plate magnetic materials. No impurities on the surface, and check whether the attractive force is normal or not. (general plate thickness should be more than 10mm)
2. Please placed the magnetic base drill required from the drilling near site and select the appropriate adsorption material. And will handle hole safety rope penetrates into the frame, the other one is in fastening frame after the penetration of the buckle, and then close the safety rope buckle. Hand and pull off, should not loose and mobile.
3. For a support screw, regulating the support screw that the bottom touches the workpiece surface.
4. For the magnetic base is provided with the angle of the drill, the use of angle wrench movement angle disk in the annex to the belt rack makes bit central alignment processing position, tighten the angle wrench.
5. Open the electric drill switch, check whether the drill bit beat, sound is normal, if everything is normal can turn the handle to feed.
6. Start feeding should be slow, gives the quantity of about 0.05mm/r in general, not too much force, to prevent overload.
7. If the drill suddenly stopped, you must turn off the power switch immediately, (Must close the magnetic control switch)
8. Please shut down for a period of time machine in continuous use for 2-3 hours, in case magnetic base is overheated and leakage or burned.
9. Should be filled with cooling water or cooling liquid using hollow drill, turn on the tap, and let it flow out slowly.

10. The company factory hollow drill are equipped with cooling kettle, please put the kettle arranged on the corresponding position before operating the machine, and tighten the two round head screw. The kettle is connected after please figure two (035), fittings is screwed on the hydrosphere, tighten the end can be on the frame by.

11. After 300 hours of operation, the gear lubricating oil should be replaced.

GROUNDING DEVICE

This tool should be properly grounded, in order to avoid the shock. Grounding device should have the lead standard, and a grounding plug with earthing special line. Do not be ground false joint in the line of fire or three-phase line. Grounded power receptacle should be connected with the earthing device is connected to the eternal, so that it can work with yellow green wire connected to the plug hole and connection piece at the same time and ground connection.

QUALITY ASSURANCE

Consumers buy our machines produced within twelve months, enjoy free maintenance and warranty service. During normal use of the whole or parts of any manufacturing process or product failures caused by components, please present the original invoice, the dealer stamped and filled properly warranty certificate to the Company or the Company's designated repair station to receive free services. machine consumable normal wear and tear, overload, do not operate according to operating specifications, disassemble, damage caused as a result of use of parts other than the Company and damage, are not covered by warranty. warranty expires, provided by the designated repair station maintenance service. maintenance records must be sealed or signed by the repair station to take effect.

FAULT HANDLING

FAULTS	CAUSES	ELIMINATION METHODS
Magnetic base without suction	Switch contact undesirable	Repair the switch
	Power supply is broken	Repair the power supply
	The fuse burn out	Replace the Fuses
	Electromagnet short circuit or burn out	Repair or replace the magnetic bridge
	Adsorption not on the steel frame	Change the adsorption surface
Machine did not run after the jump	Switch contact undesirable	Repair and change switch
	Joint loose	Check the electric drill part connector
	Brush and commutator poor contact	Repair or replace the electric brush
	Drill the armature or stator coil burn out	Changing the armature or stator
Magnetic little suction	Adsorption artifacts thin	Replace the adsorption surface or thickening adsorption surface (>10mm steel sheet)
	Adsorption on the surface is small	Replace the adsorption surface or temporary welding thick surface adsorption
	Support bar between the adsorption surface	Support bar top tight
	Diode may be virtual welding	Re Welding
Turn the handle guide does not work	Shaft key cut	Replace the shaft key
	Wheel and rack misplace	Unscrew the rack bottom screw, remove guide to repair
Drill out the elliptical hole	For a drill and a fastener is loose	Correction of verticality tighten the fasteners
	Bit unilateral cutting	Grind anew
	Adsorption surface have sundry	Eliminate clutter
Spindle shake	Frame adjusting screw loose	Tighten adjusting screws
Electric ignition	The spark turns orange.	Slow down.
	Sparks flying out.	Change the brush, please.
	Sparks into a ring of fire	Please check if the motor is burned.

Warning: magnetic drill equipped with a safety rope, when operating, make sure the magnetic drill and the object is fastened by the rope. In case of power failure suddenly, causing the machine fall off or thrown objects and cause accidents.

Attention: Our company does not assume any responsibility because the machine is not solid or fixed safety facilities are not in appropriate place cause accident.

MAGNETIC DRILL

1.Single-phase magnetic drill specification table

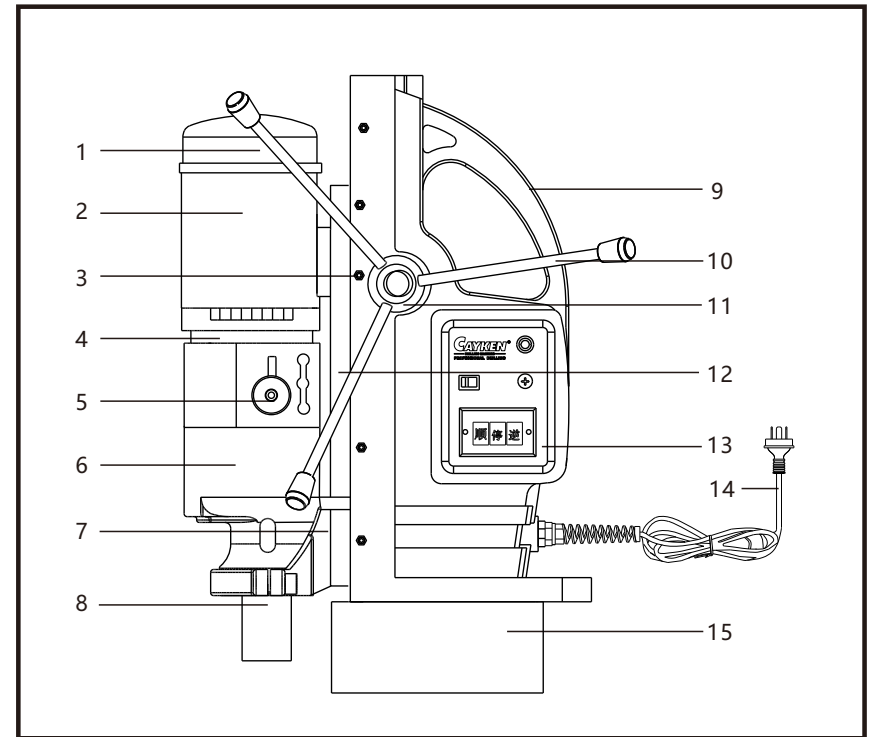
Specifications	SCY-1300 SCY-1300E SCY-1300RE	SCY-1600 SCY-1600E SCY-1600RE	SCY-2300 SCY-2300E SCY-2300RE	SCY-2800 SCY-2800E SCY-2800RE
Max.hole diameter mm	13	16	23	28
Rated frequency Hz	50-60	50-60	50-60	50-60
Rated voltage V	110/220~	110/220~	110/220~	110/220~
Max.attraction N	9500	11500	14000	14800
Rated input power W	1250	1480	1500	1780
No-load speed rpm	850 100-850 100-850	680 100-680 100-680	440 100-440 100-440	340 100-340 100-340
Arbor Tool Holder	13#drill chuck	16#drill chuck	2#	3#
Stroke mm	140	160	180	190
Weight Kg	9.5	15	25	28

2.Three-phase magnetic drill specification table

Specifications	SCY-3200 SCY-3200C SCY-3200RC SCY-3200/3RT	SCY-3800 SCY-3800C SCY-3800RC SCY-3800/3RT	SCY-4900 SCY-4900C SCY-4900RC SCY-4900/3RT	SCY-6000 SCY-6000C SCY-6000RC SCY-6000/3RT	SCY-8000 SCY-8000C SCY-8000RC SCY-8000/3RT	SCY-100 SCY-100C SCY-100RC SCY-100/3RT
Max.hole diameter mm	32	38	49	60	80	100
Rated frequency Hz	50-60	50-60	50-60	50-60	50-60	50-60
Rated voltage V	380~	380~	380~	380~	380~	380~
Max.attraction N	16800	17000	18000	23000	25000	25500
Rated input power W	2100	2300	2500	2700	2800	3180
No-load speed rpm	280 150-280 150-280 95-188-235	250 135-250 135-250 75-135-220	220 120-220 120-220 68-140-210	210 105-210 105-210 66-132-195	200 100-200 100-200 50-100-115	108 45-108 45-108 45-90-108
Arbor Tool Holder	4#	4#	4#	5#	5#	5#
Stroke mm	200	210	200	210	250	350
Weight Kg	41/42/42/43	42/43/43/44	42/43/43/44	43/44/44/45	56/57/57/58	58/59/59/60

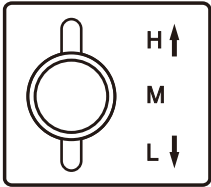
※Models with RE and RC and RTC have the function of positive and negative rotation.

MAGNETIC DRILL STRUCTURE INTRODUCTION



- | | |
|-----------------------|-------------------|
| 1.air intake cover | 9.bracket |
| 2.stator case | 10.handle bar |
| 3.screw | 11.lifting shaft |
| 4.intermediate flange | 12.lifting guide |
| 5.knob | 13.panel assembly |
| 6.gear box | 14.power line |
| 7.clamp | 15.magnetic base |
| 8.spindle | |

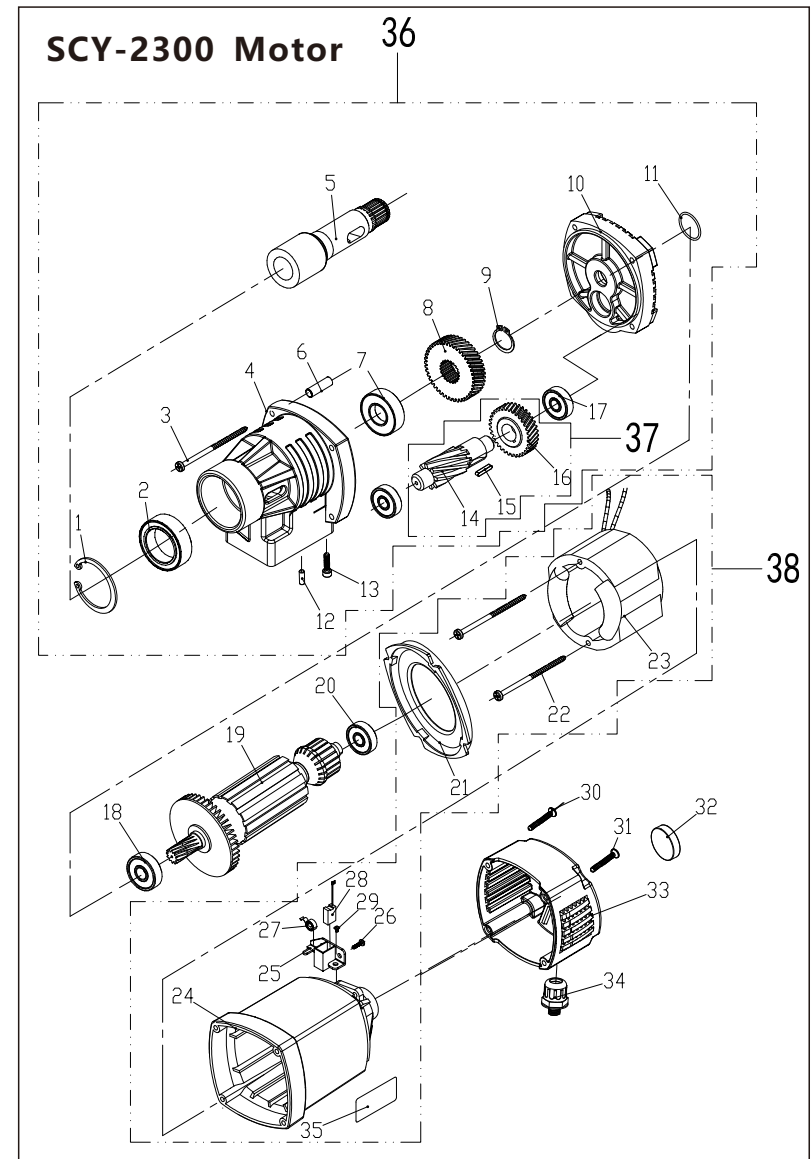
MAGNETIC BASE DRILL POSITION DESCRIPTION



- The machine shift before putting the gearshift knob screw loose to will fall next state (the best), shift after tighten the knob.
- Shift when the machine stops or will stop.
- Shift in place. If the spindle doesn' t rotate or there is somenoise after starting up, the gear may not shift in place. Turn off the machine im mediately, and then shift the gear to proper place, rotate the spindle back and forth (easy to shift) at the same time till shift in place
- Do not shift when the machine is full-speed operated, over load or stuck.
- **L** is for low speed, **H** is for high speed and, **M** is for medium speed(3 speed models). The drawing is for low speed. Low speed to high speed, turn the knob clockwise, otherwise,anti-clockwise.
- **L—LOW SPEED:** For hard materials, large drill bit (cutter tools), tapping
- **M—MID SPEED:** For the appropriate size, hollow drill, twist drill
- **H—HIGH SPEED:** For soft material, small drill bit holder. (cutter tools)



NO.	Parts Name	QTY
1	Inner card 52	1
2	Bearing 6205	1
3	Round head cross self-propelled screw M5 * 55(half tooth)	4
4	Gear box 19	1
5	Spindle 23	1
6	Cylinder ϕ 4 * 12	1
7	Bearing 6204	1
8	Spindle gear 23A-3	1
9	Card 16	1
10	Center cover 19	1
11	O-ring ϕ 31.5 * 1.8	1
12	Cylinder ϕ 5 * 15	2
13	Hegonal screw M6 * 25	4
14	Class I tooth shaft 23A-2	1
15	Crescent pin 4 * 12	1
16	Class I gear 23A-1	1
17	Bearing 629	2
18	Bearing 6201	1
19	Rotor SCY-2300	1
20	Bearing 6200	1
21	Bend 19	1
22	Round head cross self-propelled screw M5 * 70(half tooth)	2
23	Stator SCY-2300	1
24	Stator shell 19	1
25	Brush frame 19 copper	2
26	Round Cross Screw M4 * 10	4
27	Bypass 19/40	2
28	Carbon Brush 19	2
29	Round Head Cross Screw M4 * 8(Copper)	2
30	Round head cross self-propelled screw M4 * 50(half tooth)	2
31	Round head cross self-propelled screw M4 * 60(half tooth)	2
32	Horizontal 15 * 6	1
33	Top cover 19-G	1
34	Hose connector M12 * 1.5	1
35	Commercial sign 19	1



NO.	Parts Name	QTY
1	Iguide 16-19YW	1
2	Teeth 14 * 14 * 250(M2)	1
3	Parameter Panel SCY-19	1
4	Cross level screw M3 * 8(copper)	3
5	Bottle screw M5 * 12	2
6	Volume 3 * 8	3
7	Folding slider SCY-19	1
8	Frame 19YW	1
9	Nut M5	6
10	Adjusting sliders 19	1
11	E-card 15	1
12	Roller pads 17 * 30 * 0.5	1
13	Bearing 6903	1
14	Card 18	1
15	Lift gear 16-19	1
16	Composite bearings 26 * 30	1
17	Lift shaft 16-19	1
18	Marketing 5 * 14	1
19	Handle connector 10 * 16 * 50	3
20	Blade handle, 11-19.	3
21	Outer hexagonal screw M10 * 110	3
22	Button head SKT-20	3
23	Inner hexagonal top wire M5 * 22	6
24	Hose joint M16 * 1.5	1
25	Pad M4	2
26	Waveform gasket M4	1
27	Copper nose OT 1.25 -4	1
28	Round Cross Screw M4 * 8	1
29	Power cord 3 * 1.0 * 2.5 M	1
30	Fold proof connector M12 * 1.5	1
31	Panel Box 19	1
32	Circuit board SCYXLB 202-102	1
33	Button Panel 19	1
34	Stainless steel large flat head screw M3 * 6	8
35	Black waterproof switch KJD17-10 FT / 230V -50HZ	1
36	Switch KCD4(red dot)	1
37	Fuse MF-527	1
38	Hegonal screw M4 * 10	4
39	Disk CX-202 * 103 * 45	1
40	Smooth strips SCY-19	1
41	Hegonal screw M8 * 22	4
42	Hegonal screw M	3

