Planetary floor grinder

Instruction manual

A5-L34

Thank you for purchasing our product. Please read this manual before use, and operate in strict accordance with the requirements within. After reading please keep it in a safe place for further reference.

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1. Overview

1.1. Overview

Floor grinders A5-L34 are used for treatment of floor surfaces. This manual contains information on operation and maintenance of grinders and warnings and other information. In order to use grinders safely and efficiently, please read this manual carefully before operation, and keep this manual in a safe place for future reference.

1.2 . Accessory list

- ① Grinder, 1 set
- (2) Instruction manual, 1 copy
- (3) Frequency converter manual, 1 copy
- (4) Wireless remote control, 1 set with accessories
- (5) Toolbox, 1 piece with tool kit

1.3 . Goods acceptance

When you receive the goods, please check the packaging and equipment carefully for any shipping damage. If you find any signs of damage to the equipment, please contact your local distributor. If there is damage to the packaging, please provide feedback to the transporter on the damage to the packaging in a timely manner.

Please check carefully whether the delivery is in accordance with the order and whether all accessories are delivered. In case of any doubt, please contact your local distributor.

1.4 . Equipment data plate

	CE
Brand	
Name	
Model	Size
Motor	series NO.
Voltage	Year of production
weight	Exfactory date

1.5 . Warnings

In order to keep personal safety and avoid equipment damage, it is necessary to pay attention to important safety information contained in this manual, and to observe all safety instructions.

Warnings related to power supply

Do not pull the power cord when inserting or removing the power plug, always hold the plastic part tightly, and do not use it when the power supply has failed or the plug is worn out. If the power cord is worn or damaged it must be repaired or replaced.

Please use the standard special power socket alone, as this socket should not be used with other electrical appliances. Power plug should maintain firm contact with the socket, otherwise it may lead to fire or other safety hazards. Please make sure that the socket grounding electrode has a reliable ground wire.

For safety reasons it is forbidden to place any items and power cables on top of the motor. It is available to hang the cable securely by means of an overhead pole device.

When the power is off, the power plug should be removed to prevent the motor life from being affected by long standby.

Safety warnings related to use

Unauthorized modifications are strictly forbidden and maintenance of the grinder must be carried out by professionals. If the internal machinery is damaged, to avoid risk, it should be replaced by the manufacturer's maintenance department or by a relevant professional.

Do not flush or spray the motor with water; do not leave the grinder in a damp place where water is easily splashed for a long time, so as not to affect the insulation performance of the grinder motor.

Before using the floor grinder, please make sure there are no obstructions around and keep the running track unblocked.

When using the grinder, please press the [Emergency Stop] button to stop working in case of an accident.

When the grinder is running on the slope (maximum slope 15°), try to keep the equipment speed slow; when operating on a decent, head of the grinder should be run in the opposite direction; when operating on an ascent, head of the grinder should be run in the opposite direction.

Qualified professional

Only qualified personnel who meet all necessary requirements are allowed to operate, and their operation must also comply with relevant operating instructions, especially as regards safety. When working, do not wear too loose clothing and accessories to avoid pulling clothes when operating the equipment; it is required to use professional protective equipment, such as safety goggles, safety gloves, safety shoes, safety masks, ear protectors, etc.

1.6 . Warranty coverage

The product warranty period is one year. It starts from the date of leaving the factory.

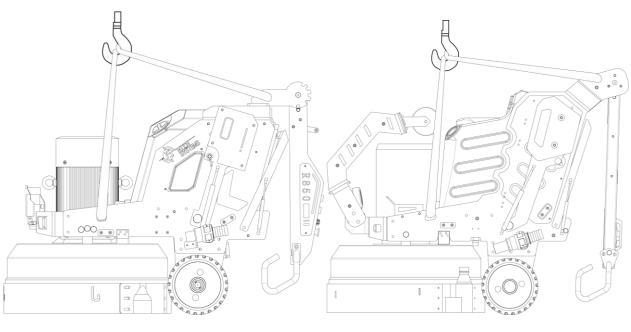
We shall not be held liable for any direct, indirect, intentional or unintentional damage and hidden defects caused by improper use, use outside specification, unauthorized disassembly, or modification. Under no circumstances shall the company be liable for indirect damage or costs incurred for shipping, unpacking and other conditions. Please contact your local distributors if they have special warranty terms.

1.7 . Equipment lifting and transportation

When transporting, please fix the equipment on pallets or other fixtures for transportation so as to avoid damage during transportation and unnecessary losses.

Please use crane or forklift and other construction machinery to lift and move the equipment. When lifting and moving, please put the lifting rope (load capacity 1000kg) through dedicated lifting hole (for lifting and transportation) (illustration).

Please check carefully whether the lifting rope is firm before lifting. When lifting the equipment, make sure there is no person staying or obstacle blocking within the moving range to avoid unnecessary personal injury or collision damage to the equipment.

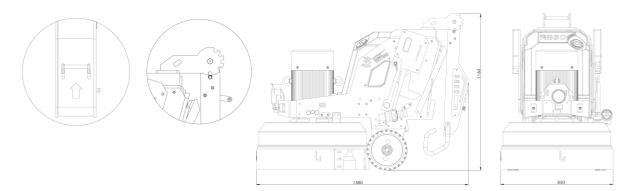


Lifting of grinder

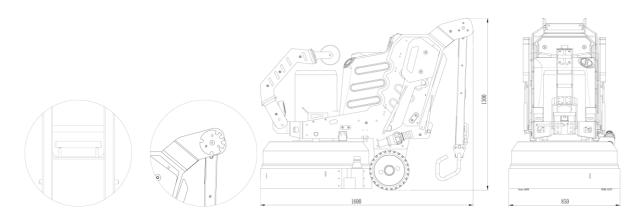
Lifting of grinder

1.8 . Minimum package size

When packing or transport space is limited, the crank arm adjusting handle can be adjusted to the lower position, so that the equipment can reach the minimum floor area or package size.



Minimum package size

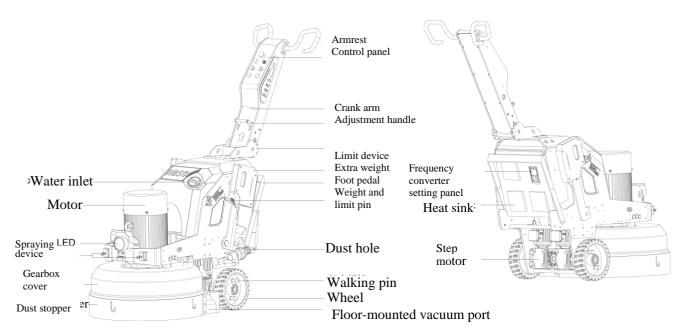


Minimum package size

1.9. Disclaimers

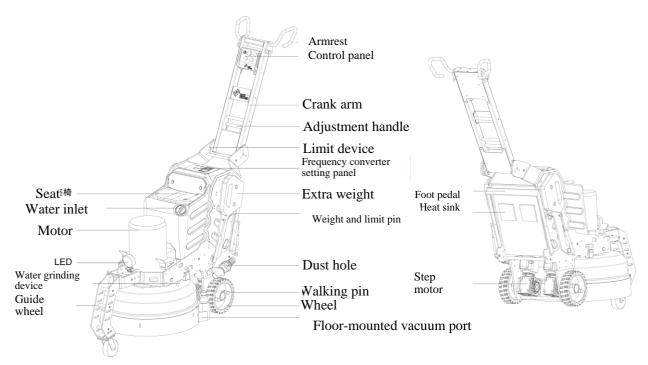
We undertake to revise this manual and reserve the right to correct or change information within. No additional notice will be given in the event of subsequent changes to the product; we will endeavour to make this manual as complete and accurate as possible, but shall not be held responsible for any errors or missing information.

- 2. Product structure
- 2.1 . Whole machine structure
- 2.1.1 Whole machine structure



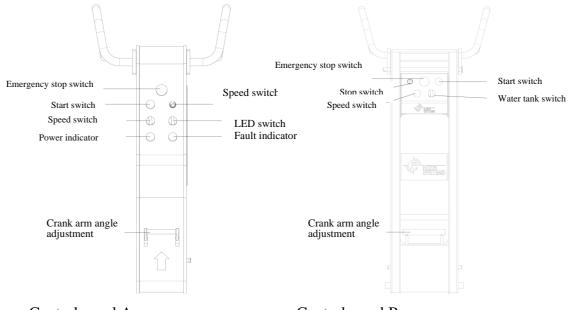
* Some features and accessories ordered may not be exactly the same as in this illustration, please check the actually delivered goods

2.1.2 Whole machine structure



* Some features and accessories ordered may not be exactly the same as in this illustration, please check the actually delivered goods

2.2 . Control panel manual button functions



Control panel A

Control panel B

2.2.1 Emergency stop switch: When starting the equipment, you need to open the emergency stop switch first; when stopping the equipment, close and reset all the switches and then close the emergency stop switch at last; when the equipment is running, if there is an emergency, you can press the emergency stop switch to cut off power supply to the equipment to protect personnel and the equipment.

2.2.2 Start switch: Press the start switch, the motor starts and the equipment starts to run.

2.2.3 Speed switch: Slowly rotate the speed control switch to increase the motor speed to reach the corresponding working rotary speed.

2.2.4 Spraying switch: Spraying switch can be turned on when grinding, and spraying system operates to reduce the dust in the air during dry grinding operations.

2.2.5 Water tank switch: During water grinding, rotate the water tank switch and water flows into the ground through water grinding device.

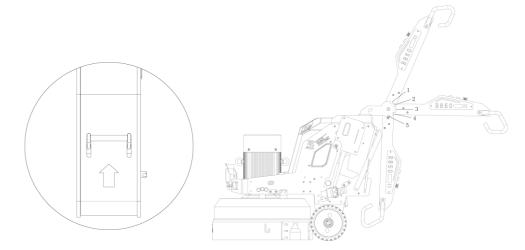
2.2.6 LED lighting switch: In case of insufficient lighting or working at night, rotate to switch LED lighting on.

2.2.7 Power indicator: Lights up after the emergency stop switch is turned on.

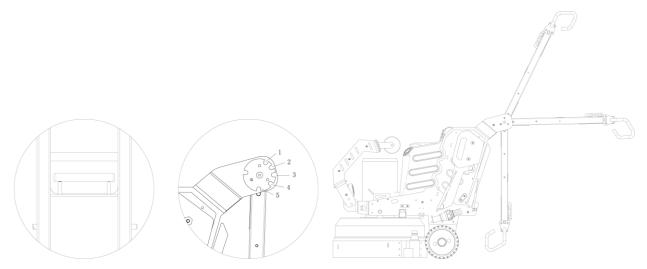
2.2.8 Fault indicator: When there is a fault in the equipment, the fault indicator comes on, then the equipment should be stopped immediately and fault should be investigated before continuing to run the equipment.

2.2.9 Crank arm angle adjustment: A limiting device for adjusting the angle of the crank arm. Pull up and adjust the crank arm to the desired gear of the current working mode.

2.3 . Crank arm angle adjustment (five gears)

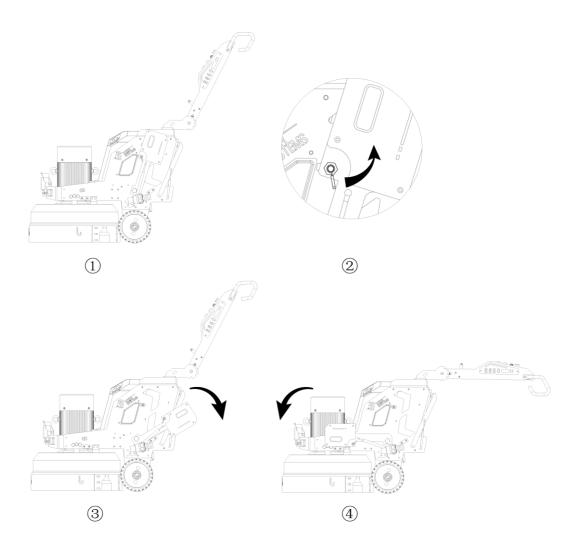


Crank arm angle adjustment



Crank arm angle adjustment

2.4 . Extra weight position adjustment and function



(1) Angle of extra weight in normal limit state.

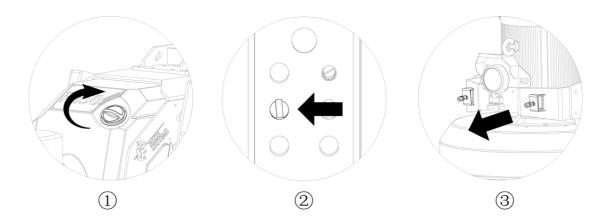
(2) Pull up rotary limit pin to open extra weight limit and adjust extra weight to the desired position for current working mode.

③ Extra weight is angled backwards and auxiliary equipment is cocked.

(4) Extra weight assembly is angled forward to increase weight of the head and deepen ground grinding depth.

2.5 . Water tank cap schematic, spray / water grinding device schematic

2.5.1 Water tank cap schematic, spray device schematic

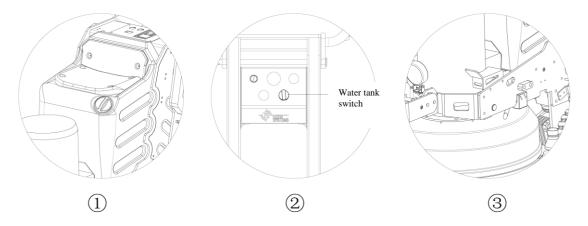


(1) Unscrew water tank cap and inject an appropriate amount of water (see technical parameters of each model for water tank capacity).

(2) When grinding is in operation, turn the spray switch and on spray system runs.

(3) The spray system sprays water mist to reduce dust in the air during dry grinding operation. The spray system can also be turned on by wireless remote control; for details please refer to wireless remote control operation instructions in Section 3.

2.5.2 Water tank cap schematic, water grinding device schematic

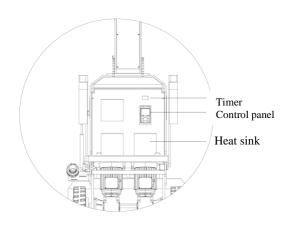


(1) Unscrew water tank cap and inject an appropriate amount of water (see technical parameters of each model for water tank capacity).

(2) Turn the water tank switch on when water grinding is in operation.

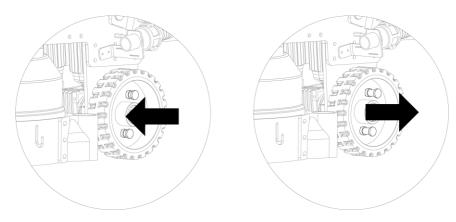
(3) Water flows into the ground through the water grinding device.

2.6 . Frequency converter



Frequency converter has been professionally set at the factory to match the equipment, so nonprofessionals should not make changes to relevant settings; if you need reference, please refer to the manual of the inverter in the accessories; you can check running time of the equipment through timer outside the inverter box.

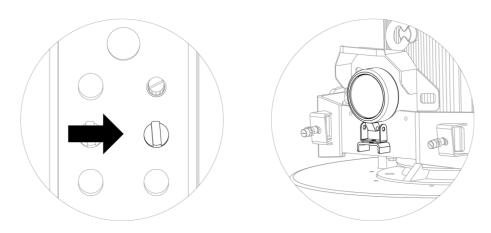
2.7 . Wheel limiting device



2.7.1 Before performing hand push operation, please turn the wheel limiting device on.

2.7.2 Wireless remote control allows to control operation of the equipment in hand push mode, and mode switching device between remote control and hand push operation is set at the wheel.2.7.3 During wireless remote control operation, the wheel limiting device is in push in state (factory setting of the equipment) and the grinder can be controlled wirelessly by the remote control.

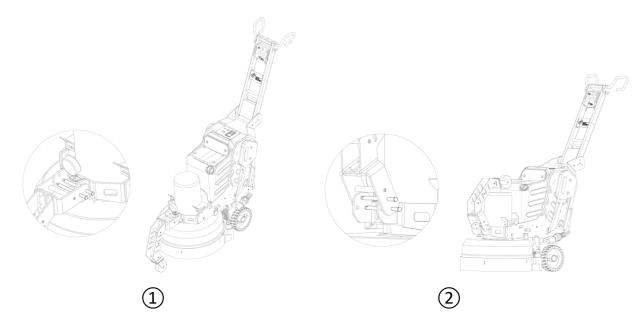
2.8 . LED lighting



In case of insufficient light or working at night, the LED light switch on the control panel can be turned on by rotation.

When operating by the wireless remote control, please refer to the wireless remote control operation instructions in Section 3 for details.

2.9 . Guide wheel device

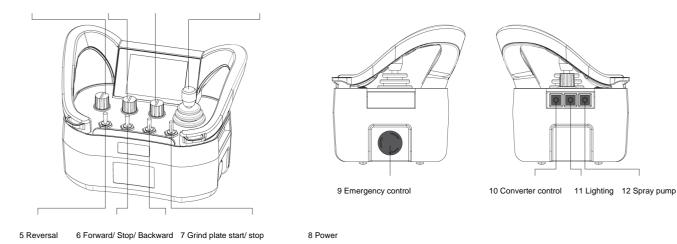


(1) Remove the locking ring on the pin and pull out the pin for installation and removal when the guide wheel is in forward position.

(2) Remove the locking ring on the pin and pull out the pin for installation and removal when the guide wheel is in retracted position for transportation or stopping.

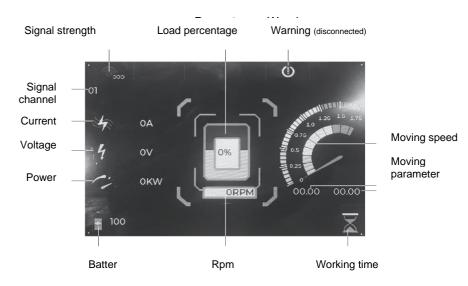
3. Wireless remote control operation instruction

3.1 Wireless remote control button introduction

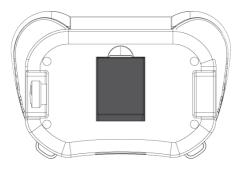


1 Moving speed control 2 Rpm control 3 Offset compensation knob 4 Direction rocker

3.2 Wireless remote control display screen introduction

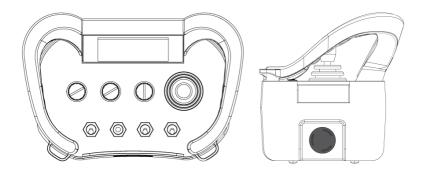


3.3 Remote control battery installation



Install the battery before using the remote control, by pressing down the clamp.

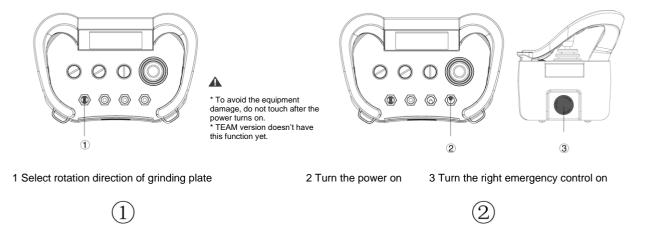
3.4 Resetting

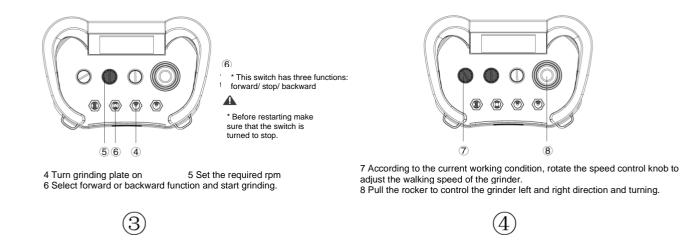


Reset all function switches on the remote control to the initial state.

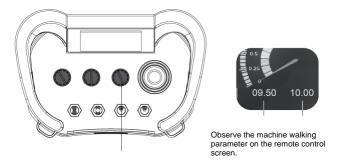
3.5 Operation check

Before controlling the equipment with the remote control, please check that the emergency stop switch on control panel on the equipment is pressed, and then operate the remote control according to the following steps.



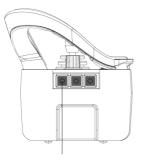


3.6 Equipment travel offset compensation knob



If there's a slope with a small angle on the ground, observe if direction of the grinder deviates, which can be controlled by rotating the offset compensation knob, where rotating it anticlockwise allows to direct the machine to the right, and rotating rotating it clockwise allows to direct the machine to the left.

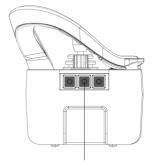
3.7 Signal channel adjustment



* When multiple remote controls are working in the same environment, adjust remote controls to different frequency channels to avoid co-frequency interference.

Under the multi-frequency condition, there might be some interference for the remote control to receive signal; then press and hold the first left button (channel adjustment button) for 5 seconds, and then the signal will be switched and the receiving frequency will change as well; in the meantime, the screen will show switch of the channel; there are 8 frequencies available on the signal channel.

3.8 Function buttons on the left side of the remote control



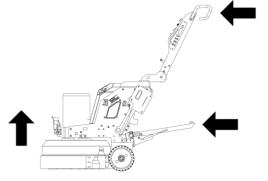


* Depending on the grinder version.

For working at the night time, the second left button can be used as the lighting switch.

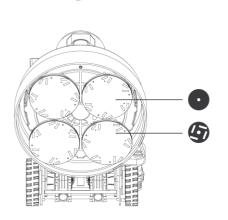
The third left button is switch of water spray pump, and activating it can reduce dusting when grinding.

- 4. Operation and use
- 4.1 . Installation/ replacement of grind segments operation schematic



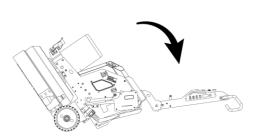
While holding the crank grip device step on the pedal

(1)

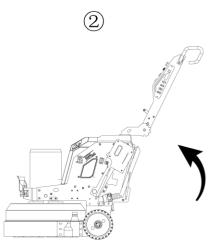


Install a diamond head or a grind segment





Slowly and smoothly lower the grinder by pushing the weight downwards



Restore the grinder to its normal position

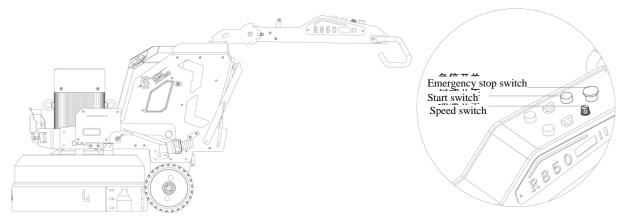
(4)

4.1.1 When installing or replacing a grind segment, make sure that the grinder is put down smoothly and not to do perform this operation on a sloping surface.

4.1.2 When the equipment is working, gearbox, grinding disc and grind segment generate high temperature, so pay attention to prevent burns when replacing grind segment.

4.1.3 Make sure that power is disconnected and the emergency stop switch is off before installing or replacing grinding discs.

4.2 . Start/ stop operation procedure schematic

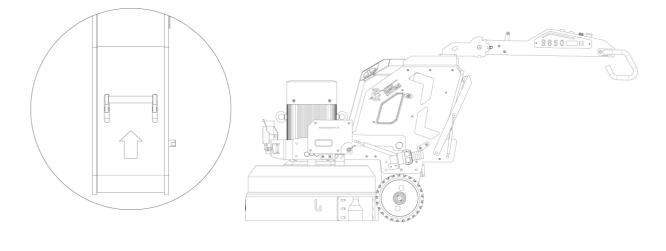


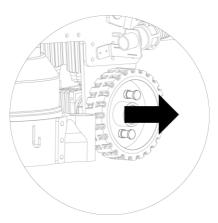
4.2.1 The illustration shows schematic of hand push working mode, and wireless remote control working mode is shown in wireless remote control operating instructions in Section 3.4.2.2 Before starting the equipment, adjust the extra weight device and crank arm to the corresponding working condition.

4.2.3 Rotate the emergency stop switch to on position, rotate the start switch to on position, slowly rotate the speed switch, increase motor speed to reach the corresponding working speed, and then push the equipment forward or backward button with the armrest in hand.

4.2.4 When stopping the grinder, slowly rotate the speed switch to off position, then rotate the start switch to off position, and finally use the emergency stop switch to stop the machine.4.2.5 When stopping the machine, please disconnect the power for safety reasons.

4.3 . Hand push operation setting

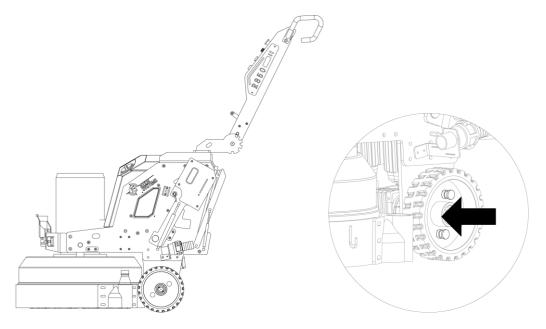




4.3.1 When performing hand push operation, adjust the crank arm angle limiting device, pull up the handle and adjust the crank arm to the required gear for the current working condition.

4.3.2 Set the wheel limiting device out and then connect the equipment to power supply and start up.

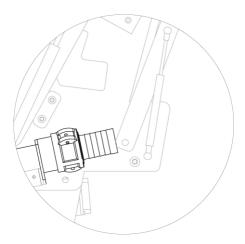
4.4 . Schematic of limit switch during wireless remote control operation



4.4.1 When operating by wireless remote control, it is recommended to adjust the crank arm to the illustrated state to the corresponding gear.

4.4.2 Check or reset the wheel limit device in the push in state; connect power supply to the equipment and operate the machine with wireless remote control.

4.5 . Connecting dust suction port to industrial vacuum cleaner



4.5.1 The dust pipe interface is used to connect the interface of the industrial vacuum cleaner. Dimensions of the dust port interface are given in technical parameters of each model, and customized products are equipped according to the order.

4.6 . Common problems and solutions

The summary describes some possible defects and how to deal with them. If you fail to get a solution or there are other situations, please contact your local distributor.

Problem	Possible causes	Solutions
Machine won't start or there is a strange noise	Emergency stop switch not turned on	Turn on the emergency stop switch, check if all switches are in reset state beforehand

Problem	Possible causes	Solutions	
	Motor overload Frequency converter display o.L.1	Turn off all switches, disconnect power supply and then reconnect	
Machine won't start or there is a strange noise	Motor overload Frequency converter display o.L.2	Turn off all switches, disconnect power supply and then reconnect	
	Power connector is not connected tightly or power cord is damaged	Check if power connector is connected tightly or replace power cord	
	Out of phase input Frequency converter display Err2	Connect to the correct three-phase input power	
	Motor damage	Contact the manufacturer for repair or replacement	
Grinder shaking or	Diamond grind segments are not properly installed	Check or reinstall the same model of grind segments	
skipping	Chassis of grind disc is flat	Adjust chassis flatness	
Machine forward and backward abnormalities Step motor damage		Contact the manufacturer for repair or replacement	

Problem	Possible causes	Solutions
Invalid remote control	Remote control battery is low	Observe the remaining battery power and charge it before it runs out of power
	Remote control signal interference, multiple remote control devices working simultaneously in the same environment	Adjust the remote control signal channel, long press the first button on the left side of the remote control for 5 seconds to switch the signal reception channel
	Forward and reverse switch not reset to stop gear	Check the remote control three gear switch (forward / stop / backward) and reset

If there are other problems or questions encountered during the use and operation, please check and read this manual and the manual of the inverter in detail.

5. Maintenance and care

5.1. Procedure

5.1.1 When the daily work is finished, the equipment should be routinely cleaned.

Mainly clean the sticky dust on the waterproof cover grinding disc to avoid affecting the effect of using the next process and to improve efficiency the next day.

5.1.2 Clean the inside of water tank of the grinder once every week to avoid clogging of the lower water filter by sediment.

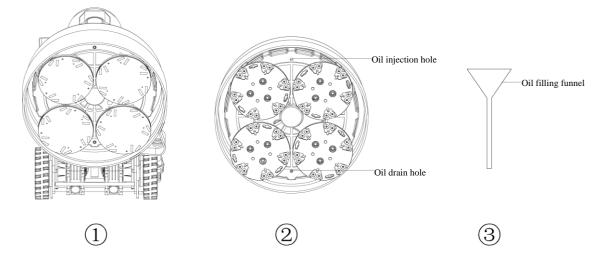
5.1.3 Routine check trouble spots of floor grinder, tighten the screws connected in the machine and check the screws of the bottom grinding disc for looseness.

5.1.4 If floor grinder is frequently used for dry grinding, the frequency converter's cooling fan needs to be cleared of dust every other month.

5.1.5 Change the gear oil on a regular basis. The first gear oil change should be carried out after 6 months of normal use of the new grinder, and then once a year.

5.1.6 Do not overuse the grinder, otherwise it will cause some damage to the motor.

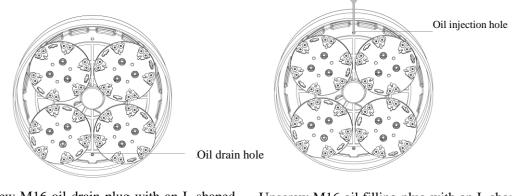
5.2. Oil replacement



5.2.1 When replacing oil, put the grinder down smoothly, never on a sloping surface.

5.2.2 Find two holes at the bottom of the gearbox, the holes are not differentiated; the top is oil injection hole and the bottom is oil drain hole.

5.2.3 Prepare oil filling funnel, see the above illustration (3).



Unscrew M16 oil drain plug with an L shaped hexagonal wrench, meanwhile oil is flowing out (pay attention to the collection and treatment of dirty oil), and then screw back the oil drain plug after oil is drained.

1

Unscrew M16 oil filling plug with an L shaped hexagonal wrench; insert oil filling funnel into the oil filling hole, pour oil through oil filling funnel, and then screw oil filling plug after oil is filled.

5.2.4 Drain old and fill new oil be following operations ① and ② shown in the figure above.

6. Technical parameters

6.1 . A-series model parameters

Project / Model		Parameters					
	Motor (HP)	7.5	15	20	25	30/25	
	Voltage (V)	380	380	380	380	380/220	
	Current (A)	12.1	22	30	30	43	
Whole machine	Grinding disc speed (rpm)	0 ~ 1800	0 ~ 1800	0 ~ 1800	0 ~ 1800	0 ~ 1800	
	Frequency converter (HP)	7.5	15	20	25	30/25	
	Step motor	Dual drive	Dual drive	Dual drive	Dual drive	Dual drive	
Accessories	Number of grinding discs	254mm*3	254mm*4	280mm*4	320mm*4	360mm*4	
	Number of grind segments	9	12	12	12	12	
	Grinding width (mm)	560*560	650*650	750*750	820*820	950*950	
	Water tank (L)	28	28	60	60	60	
	Dust extraction port	2.76 inch* 1	2.76 inch* *1	2.76 inch* *1	2.76 inch* *1	2.76 inch* *1	

Project /	Model				Darat	neters			
	Motor (HP)	3	4	7.5	7.5	15	20	20	30
	Voltage (V)	380	380	380	380	380	380	380	380
Whole machine	Current (A)	5	6	12.1	12.1	22	30	30	43
machine	Grinding disc speed (rpm)	0 ~ 1800	0 ~ 1800	0 ~ 1800	0 ~ 1800	0 ~ 1800	0 ~ 1800	0 ~ 1800	0 ~ 1800
	Frequency converter (HP)	3	4	7.5	7.5	15	20	20	30
Accessories	Number of grinding discs	175 mm *3	220 mm *3	254mm *3	260mm *3	254mm *3	280mm *3	320mm *3	360mm *3
	Not mber of grind segments	9	9	9	9	9	9	9	9
	Grinding width (mm)	450*45 0	490*49 0	560*56 0	580*58 0	650*65 0	750*75 0	820*82 0	950*95 0
	Water tank (L)	_	_	28	28	60	60	60	60
	Dust extraction port	2.76 inch * 1			2.76 inch * 1				

6.2 . B-series model parameters

6.3 . A5-L34-series model parameters

Project / Model		A1	A5-L34	A6-L37
			Parameters	
	Motor (HP)	20	25	30
	Voltage (V)	380	380	380
	Current (A)	30	36	43
Whole machine	Grinding disc speed (rpm)	0~1800	0 ~ 1800	0 ~ 1800
	Frequency converter (HP)	20	25	30
	Step motor	Dual drive	Dual drive	Dual drive
Accessories	Number of grinding discs	280mm*4	320mm*4	360mm*4
	Number of grind segments	12	12	12
	Grinding width (mm)	750*750	820*820	950*950
	Water tank (L)	55	55	55
	Dust extraction port	2.76 inch * 1	2.76 inch * 1	2.76 inch * 1

6.4 . S-series model parameters

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Project / Model					
		Parameters			
	Motor (HP)	15	20	20	30
	Voltage (V)	380	380	380	380
Whole machine	Current (A)	22	30	30	43
	Grinding disc speed (rpm)	0~1800	0 ~ 1800	0~1800	0~1800
	Frequency converter (HP)	15	20	20	30
	Step motor	—	—	—	—
	Number of grinding discs	254mm*4	280mm*4	320mm*4	360mm*4
	Number of grind segments	12	12	12	12
Accessories	Grinding width (mm)	650*650	750*750	820*820	950*950
	Water tank (L)	60	60	60	60
	Dust extraction port	2.76 inch * 1			