

SJ860 Driving floor scrubber User's manual

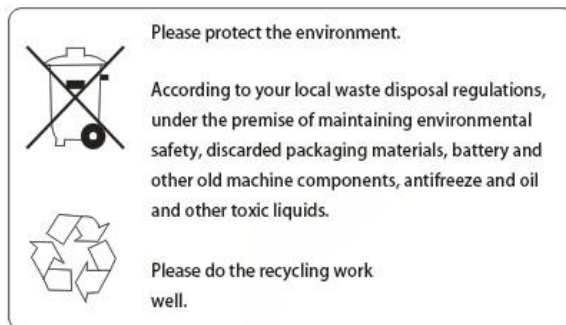


This manual provides the necessary machine operation and maintenance instructions.

Please read and understand this manual before operating or using this machine.

When ordering replacement parts, refer to the parts manual that came with your machine. Before selecting parts or accessories, please determine your machine model and serial number. You can order parts and accessories from any authorized service center or distributor by phone or post. This machine can provide excellent service. If you can do the following, you will get the best results at the lowest cost:

- Operate the machine carefully and carefully.
- Regularly maintain the machine in accordance with the maintenance instructions provided in the operator's manual.
- Use original factory or parts of the same grade for repairs



Machine data

Please fill in at the time of installation for future reference.

Model number -

Machine serial number -

Machine option -

Sales representative-

Sales representative phone -

Customer number-

Installation date -

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Precautions

This machine is suitable for industrial and commercial use. It is specially used for cleaning hard floors in the room and cannot be used for other purposes. Always use the recommended scouring pads and brushes, as well as commercially available floor cleaners for this machine.

All operators must read, understand and follow the safety precautions listed below.

The following is a description of the safety alert symbols used in this manual and the title 「For Security」 :



WARNING: Use to warn of a risk or serious unsafe operation that could result in serious personal injury or death.

For your safety: Indicate the things you must follow when using the machine to ensure safety.

Failure to follow the warnings listed below may result in personal injury, electric shock, fire or explosion.



WARNING: Fire or explosion hazard:

- Do not use flammable liquids; do not operate the machine near or in a location with flammable liquids, gases or flammable dust.

This machine is not equipped with an explosion-proof motor. If the machine is used in a place with flammable gases, liquids or flammable dust, the electric motor will generate sparks during start-up and operation, which may cause flash fire or explosion.

- Do not pick up flammable materials or reactive metals.

- The battery releases hydrogen. Keep away from sparks or open fire sources. Keep the battery compartment open while charging.



Warning: Risk of electric shock. Disconnect the battery before servicing the machine.



Warning: Rotate the brush to run. Keep your hands close. Please turn off the power before servicing the machine.

The following information indicates situations that pose a potential hazard to the operator or equipment:

for safety reasons:

1. Do not operate the machine:

- When in contact with flammable liquids or close to flammable gases,
It may cause an explosion or flash fire.
- Unless trained and authorized to operate the machine.
- Unless you have read and understood the operating manual.
- If not in proper operation.

2. Before starting the machine:

- Make sure all safety devices are positioned and operating correctly.

3. When using the machine:

- Please slow down when encountering slopes and slippery surfaces.
- Wear non-slip shoes.
- Please slow down when turning.
- Report the machine immediately if it is damaged or malfunctions.
- Do not let children play on or near the machine.
- Observe the mixing ratio and handling instructions on the chemical container.

4. Before leaving or repairing the machine:

- Park the machine on a stable floor.
- Turn off the machine.

5. When servicing the machine:

- Avoid moving parts. Do not wear loose tops, shirts or sleeves.
- Disconnect the battery before operating the machine.
- Wear protective gloves and eye protection when handling battery or battery wiring.
- Avoid contact with battery liquid acid.
- Do not rinse the machine with high pressure spray or water pipes.
- Use replacement parts supplied or approved by the manufacturer.
- All repairs must be performed by qualified service personnel.

- Do not modify the original design of the machine.

6. When moving the machine:

- Please turn off the machine.

- Do not carry the machine when it is equipped with a battery.

- Please carry the machine with the assistance of others.

- Use the recommended loading dock when loading or unloading the machine from a truck or trailer.

- Use a rope to secure the machine to a truck or trailer.

- Lower the brush head to the lowered position.

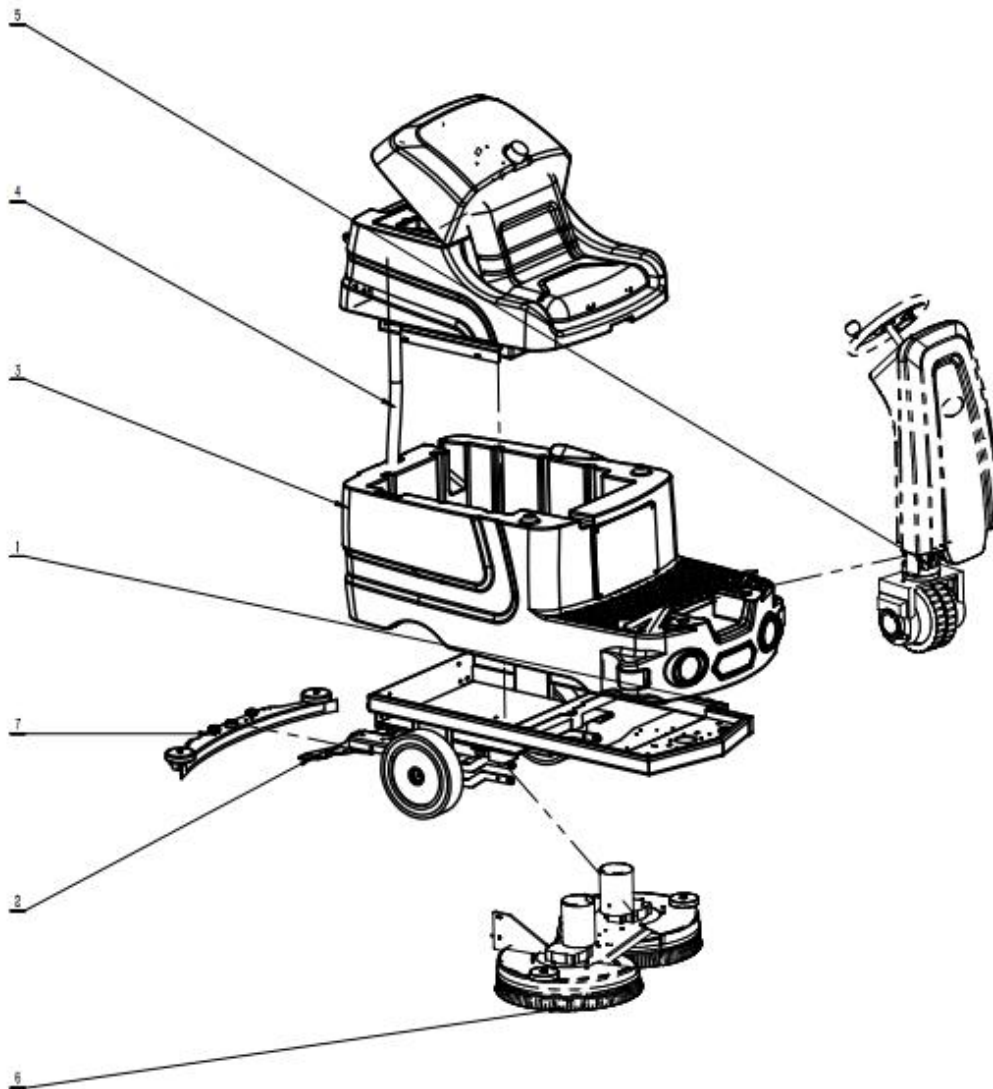
Machine operation indication





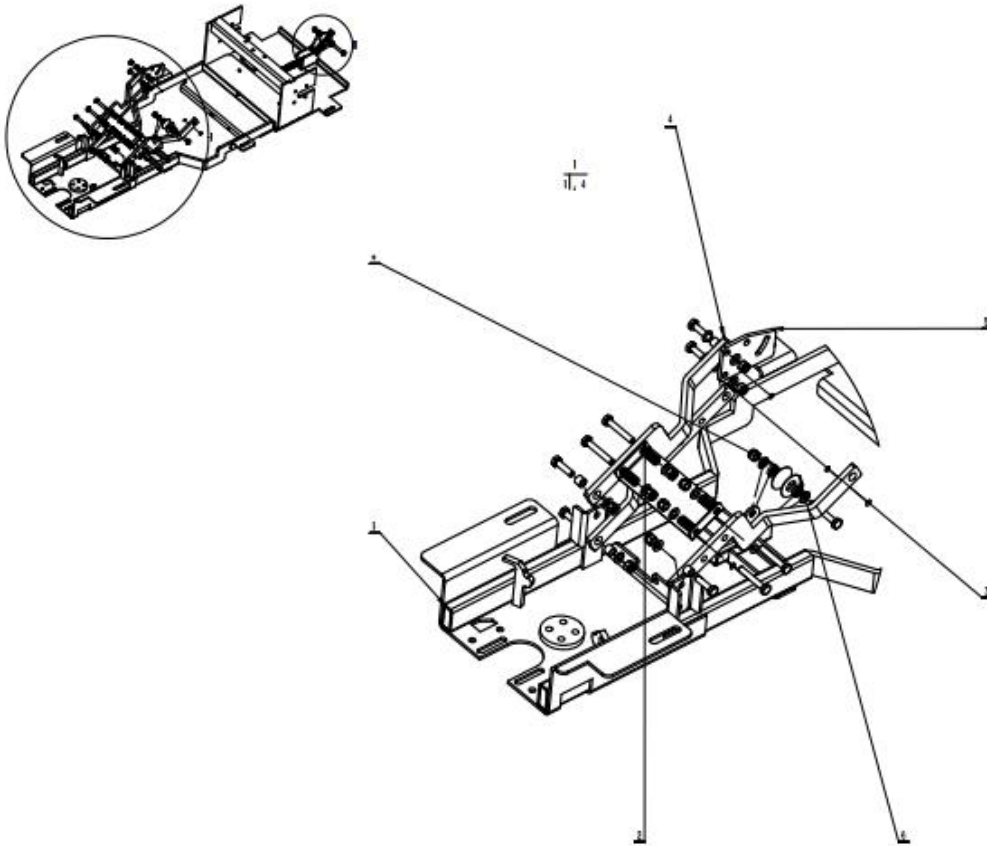
Machine explosion diagram

Overall explosion diagram of the machine



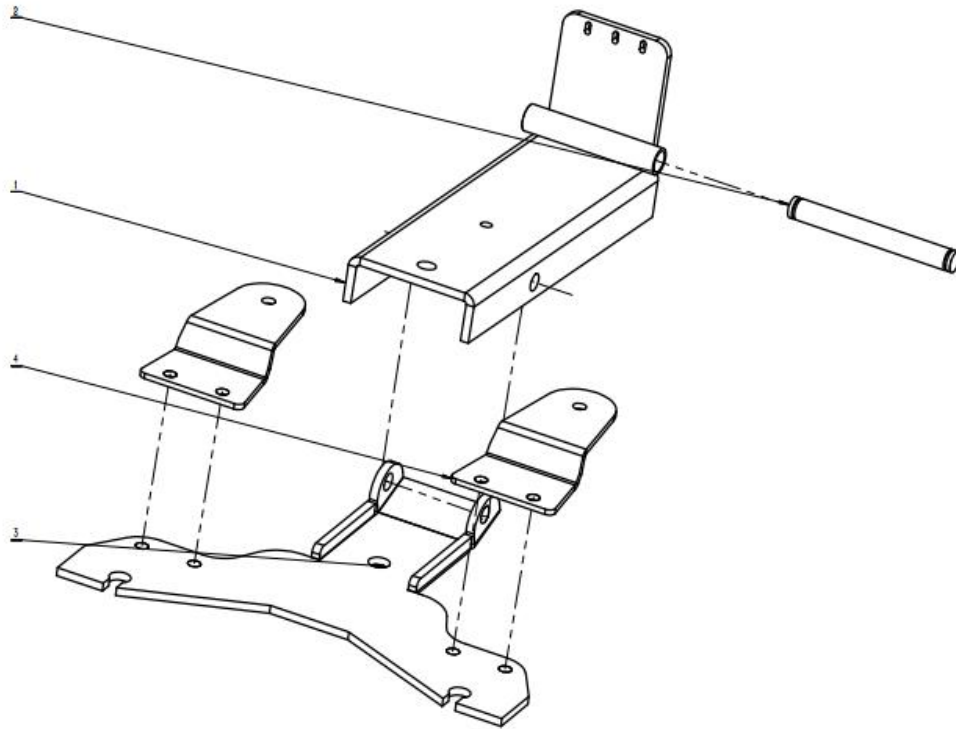
serial number	part number	Name
1	PART1	Base frame assembly
2	PART2	Bead stand assembly
3	PART3	Clean water tank components
4	PART4	Recovery Tank Assembly
5	PART5	Bogie assembly
6	PART6	Head assembly
7	PART7	Lying head components

PART 1 Base frame assembly



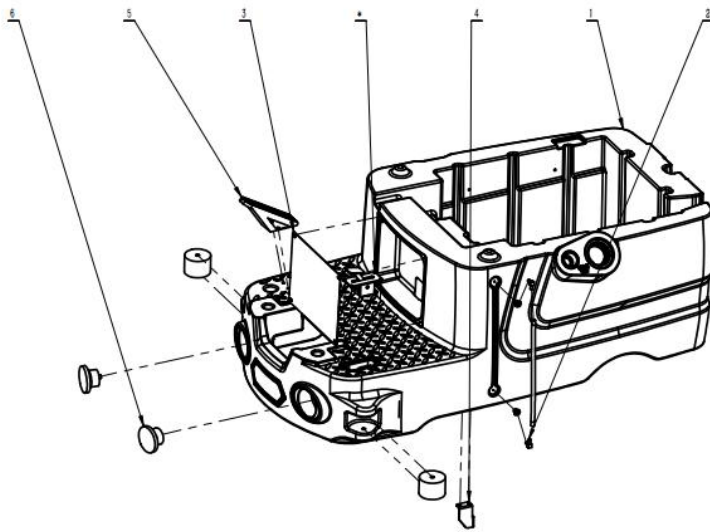
Serial number	Part number	Name
1	A010140	Base frame
2	A010148	Motor buffer plate
3	A010153	Machine head pull arm two
4	A010152	Machine head pull arm one
5	A010147	Motor adjustment plate
6	C010121	Pulley

PART 2 Bead stand assembly



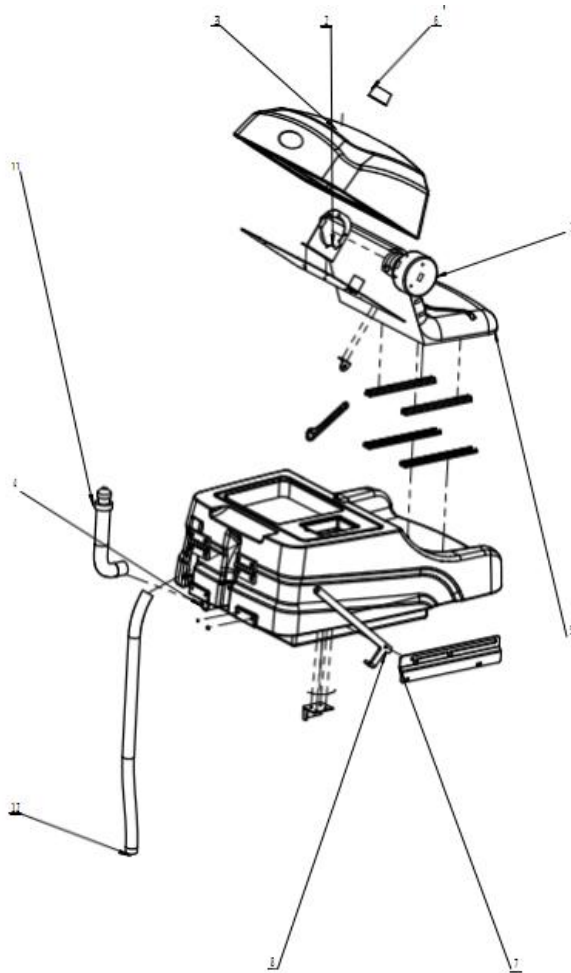
Serial number	Part number	Name
1	A010167	Top bracket
2	C010131	Transmission shaft $\Phi 15 \times 124$
3	A010168	Bottom bracket
4	A010191	Universal wheel bracket

PART 3.Clean water tank components



Serial number	Part number	Name
1	B010140	Clean water tank
2	G010114	Plastic elbow
3	A010174	Electrical board
4	A010162	Filter holder
5	E010138	Accelerator
6	E010141	Headlights

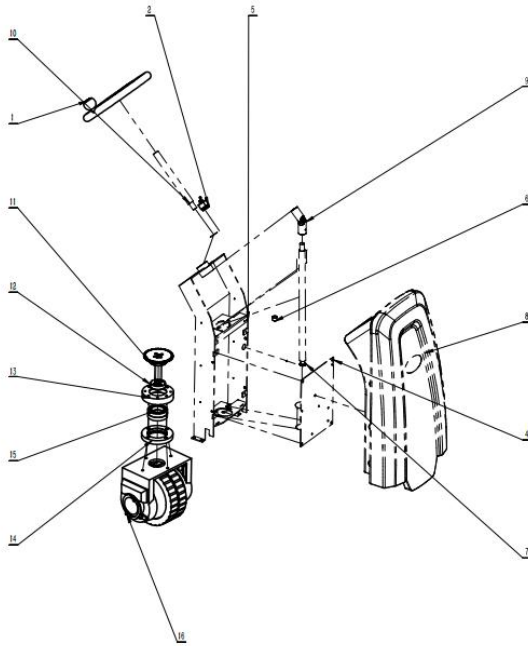
PART 4.Recovery Tank Assembly



Serial number	Part number	Name
1	E010142	Water absorption motor 24V 3 layers
2	A010188	Recovery tank cover support Plate
3	B010142	Recovery tank cover
4	B010141	Sewage tank
5	B010149	Seat
6	E010134	Warning light 24V
7	A010170	Side stand
8	A010171	Support rod
9	A010171	Support rod
10	G010105	Hinge 65x65

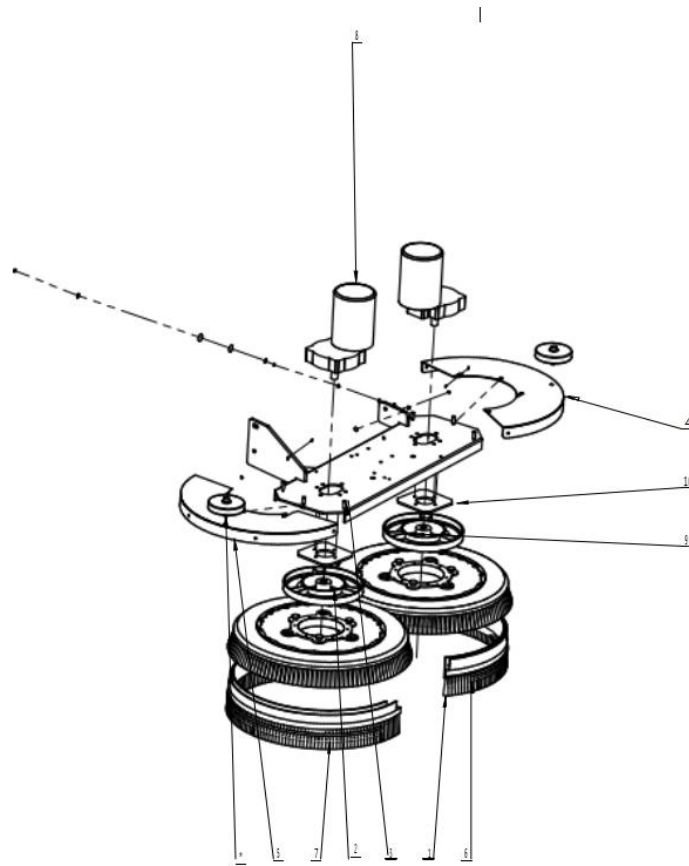
11	B010125	Sewage pipe $\Phi 38*400$ (01+09)
12	B010126	Sewage suction pipe $\Phi 38*1000$ (01+06)

PART 5. Bogie assembly



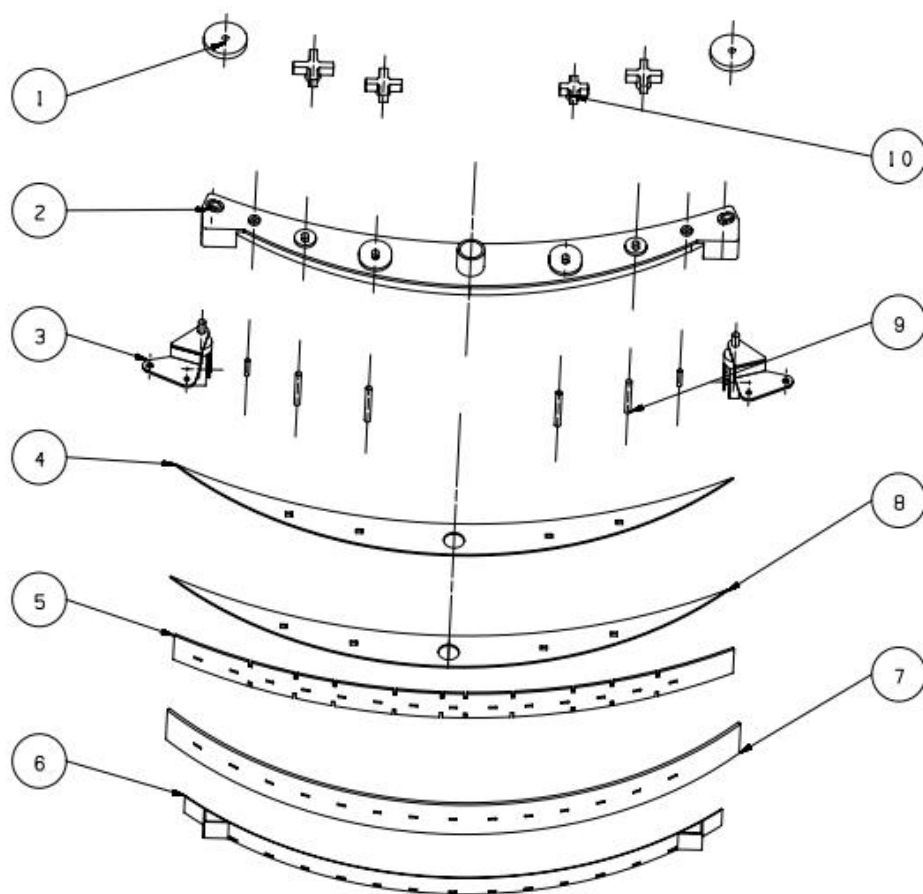
Serial number	Part number	Name
1	B010138	Steering wheel 300
2	E010135	Forward astern switch
3	H010111	Electrical cabin cover
4	A010174	Electrical board
5	A010173	Steering bracket
6	E010129	Speed control knob
7	C010139	Steering shaft
8	B010143	Steering cover
9	G010174	Gimbal 18x30x80
10	C010140	Orientation axis
11	C010135	Steering gear
12	C010136	Washer 20x60x27
13	C010137	Steering bearing seat (upper) $\Phi 128*27$
14	C010138	Steering bearing seat (bottom) $\Phi 128*17$
15	G010171	Bearing 6010
16	E010135	Drive motor 24V

PART 6.Head assembly



Serial number	Part number	Name
1		Skirt
2	B010150	16 inch brush plate
3	A010178	Brush disc motor mounting plate
4	A010175	Machine head left shield
5	A010176	Right hand guard
6	B010145	Brush plate splash strip 870
7	B010144	Brush plate splash strip 800
8	E010139	Brush motor 24V 450W
9	C010116	Brush disc lock
10	A010180	Brush plate motor fixing plate

PART 7. Suction rake system



Serial number	Part number	Name
1	SJ860005001	Anti-collision wheel
2	SJ860005002	Suction rake main frame
3	SJ860005003	Suction harrow support
4	SJ860005004	Iron accessories
5	SJ860005005	Front absorbent rubber
6	SJ860005006	Water-absorbing rubber bead
7	SJ860005007	Rear absorbent rubber
8	SJ860005008	Water-absorbing film iron card
9	SJ860005009	Screw
10	SJ860005010	Cross nut

Receiver

Unpacking the machine

1. Please check the machine box for any damage. If there is damage, immediately respond to the freighter.
2. Check the shipping contents list. If there are any missing items, please contact the seller.

Shipping content:

- 6V battery 4 - standard
- 24V battery charger 1 - standard
- 1 set of battery cable - standard
- Water-absorbing adhesive strip 1 pay - standard
- 2 scrubbing brushes - standard
- Dial 2 only - standard
- Other accessories - optional

3. Before disassembling the machine, remove the shipping fixtures and cords that secure the machine to the stack. With the help of others, carefully remove the machine from the stack.

Note: If the loading and unloading floor is not used, do not push the machine directly to avoid damage to the machine.

Note: To avoid damage to the machine, please unload the machine from the warehouse before installing the battery.

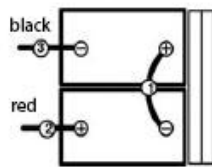
Installing the battery



WARNING: Fire or explosion hazard. The battery releases hydrogen. Keep away from sparks or open fire sources. Keep the battery cover open while charging.

For safety reasons: Wear protective gloves and eye protection when handling the battery and battery wiring when servicing the machine. Avoid contact with battery liquid acid.

1. Park the machine on a level surface and remove the key.
2. Lift the sewage tank to expose the battery compartment
3. Carefully install the battery in the battery compartment brake and connect the battery cable to the front of the machine as shown below



Note: Do not throw the battery into the battery compartment to avoid damage to the battery and the machine.

4. Before connecting the battery, please make sure the electrode and the terminal are clean. Use electrode cleaning solution and wire brush as needed.

Note: Apply a thin layer of metal-free lubricant or protective spray to the attached wiring to avoid battery corrosion.

5. After the battery is installed, check the battery scale of the battery gauge. Charge the battery as needed.

Machine cleaning method

Cleaning method:

Manually control the water valve to adjust the amount of water that the cleaning fluid (water and detergent) flows to the ground. The brush cleans the floor with a solution of detergent and water.

While the machine is moving forward, use the squeegee to draw the sewage from the floor into the recovery tank.

Brush and scouring pad information

To ensure optimum performance, use the correct brush type for cleaning. The recommended brushes and scouring pads are as follows:

Soft nylon brush (white) -

It is recommended to clean the coated floor without hurting the floor. Clean without leaving scratches.

Polishing mat (white)-

Used to maintain a highly shiny or polished floor.

Cushion (red) -

Used to scrub light dirt without hurting the ground.

Gravity folding pad (black) -

Used to remove heavy coatings or substrates with great strength or for super-strong scrubbing.

Machine installation**Attaching squeegee assembly**

1. Park the machine on a level surface and remove the key.
2. Lower the squeegee lifter to the lower position.
3. Attach the squeegee to the squeegee mounting bracket as shown in the figure. Be sure to fully insert the tightening knob into the jack and tighten the knob.
4. Attach the vacuum suction tube to the squeegee assembly.
5. Check the squeegee strip and make appropriate adjustments

Installation brush / scouring pad

Note: For recommended brushes and scouring pads, please refer to the “Brush and scouring pad information” section of this manual or contact your local authorized dealer.

1. Park the machine on a level surface and remove the key.
2. Press the brush lift pedal to lift the brush head off the ground
3. Place the scouring pad on the needle holder before installing the drive plate. Tighten the central lock to secure the scouring pad.
4. Align the hub/brush mounting post with the motor drive plate latch and press the brush motor switch.
5. To remove the needle holder and brush, press the brush head lift pedal to lift the brush head off the ground and press the brush motor switch.

Machine operation

For your safety: Do not operate the machine until you have read and understood the operating

manual.

WARNING: Fire or explosion hazard. Never operate the machine near or in a location with flammable liquids, gases, or flammable dust.

Pre-operation check

- Clean the dust on the ground.
- Check the battery scale of the battery gauge. (Refer to the battery gauge)
- Check the wear of the scouring pad/brush.
- Check the wear of the squeegee rubber strip and adjust the angle as appropriate.
- Make sure the recovery tank is empty and have a clean floating filter installed.
- Check the wear of the brush head skirt.

Operating machine

1. Turn the main power key to the (I) position.
2. Pull the squeegee lifter down to lower the squeegee assembly to the floor.
3. Press the brush lift pedal to lower the brush head to the ground.
4. Open the water control knob.
5. Press the brush motor switch and then push the suction motor switch.
6. Motor drive model: adjust the speed control knob to the cleaning speed you want.

Note: A cleaning speed of 45-60 meters per minute is recommended.

During operation of the machine

WARNING: Fire or explosion hazard. Do not pick up flammable materials or reactive metals.

1. Each cleaning path overlaps 5 cm.
2. Keep the machine running to avoid damage to the ground.
3. If the squeegee absorbs water, there are drag marks on the floor, and wipe the strip with a rag to remove the garbage. Clean up beforehand to prevent drag marks.
4. Do not operate the machine on a slope with a slope of more than 5% (3°).

For safety reasons: When using the machine, move slowly on slopes and slippery surfaces.

5. If there is too much foam, pour the recommended antifoam solution into the recovery tank.

Note: Do not allow foam to enter the filter to avoid damaging the vacuum motor. The bubble will make the filter switch fail.

6. Use a double cleaning method to clean extremely dirty areas. First lift the squeegee to clean and let the solution dipped 3-5 points.

After the clock, lower the squeegee and wash again.

7. Replace or rotate the scouring pad as needed.

8. Observe the electricity consumption of the battery power meter (refer to "Battery Power Meter").

9. Check the remaining liquid volume through the clean tank level gauge. The traditional method of washing the ground is about 10 liters per 10 minutes;

10. When the solution in the clean water tank is used up, first empty the sewage tank and re-inject the solution.

11. When the worker leaves the machine, park the machine on a level surface and remove the key.

12. After cleaning, perform daily maintenance procedures (refer to "Machine Maintenance").

Battery gauge

The battery gauge shows the battery's charge. When the battery is fully charged, all the lights are on. As the power is consumed, the indicators turn off from right to left. To extend battery life, do not let the indicator light go out below the power consumption described below.

Note: In order to extend the life of the battery, please charge the battery after the machine has been in use for more than 30 minutes.

Water tank drainage

The sewage tank should be drained and cleaned after each use. The clean water tank should be cleaned regularly to remove any corrosion. Move the machine to the drain location, turn off the power key, and drain according to the following discharge instructions: For safety reasons: Park the machine on a level surface and turn off the machine and remove the key before leaving or servicing the machine. Drainage tank.

1. Unscrew the waste water tank drain cover in the counterclockwise direction and remove it
2. Open the recovery tank cover and rinse the water tank
3. Disassemble and flush the floating filter in the recovery tank.

Battery charging

Note: In order to extend the life of the battery and ensure the best performance of the machine, the battery must be used for at least 30 minutes before the battery can be charged. Do not leave the battery uncharged for a long time. The following charging instructions apply to the charger supplied with this machine. Be sure to use the charger of the following specifications to avoid damage to the battery. Battery charger specifications:

- Charger type: - Charger for lead-acid battery
- Output voltage - 24 volts
- Output current -15 amps
- Automatic power off circuit
- Suitable for deep cycle battery charging

1. Move the machine to a well ventilated area for charging.

WARNING: Fire or explosion hazard. The battery releases hydrogen. Keep away from sparks or open fire sources. Keep the battery compartment open while charging.

2. Park the machine on a level surface and turn the key to the off position.

3. Check the electrolyte level in each battery unit before charging.

For safety reasons: Wear protective gloves and eye protection when handling the battery and battery wiring when servicing the machine. Avoid contact with battery liquid acid.

4. When charging, please open the sewage tank side to facilitate ventilation

5. Plug the charger's AC (AC) power cord into a well-grounded electrical outlet.

6. Plug the charger's DC (direct current) cable into the battery charging socket at the rear of the recovery tank.

7. The charger will automatically start charging and will automatically turn off when fully charged.

Note: The machine will not operate when the charger is connected. Note: Do not pull the charger's DC cable while the charger is charging.

Pull out the socket on the machine. In order to avoid arc discharge. If you must suspend charging during charging, first remove the AC power cord.

WARNING: Fire or explosion hazard. The battery releases hydrogen. Keep away from sparks or open fire sources. Keep the battery compartment open while charging.

8. After charging is complete, check the electrolyte level again.

Machine maintenance

As long as the daily, weekly and monthly maintenance procedures are followed, the machine remains in top working condition. Warning: Risk of electric shock. Disconnect the battery before servicing the machine.

Daily maintenance (after each use)

1. Drain and clean the recovery tank
2. Remove and flush the floating filter in the recovery tank
3. Drain the water tank and use a hot water tank not higher than 60 °C as needed.
4. Remove the scouring pad/brush for cleaning. If worn, flip or replace the pad
5. Wipe the squeegee strip. Place the squeegee assembly in the raised position to prevent damage to the strip.
6. Check the wear of the edge of the squeegee blade. If there is any loss, reverse the two ends of the strip.
7. Wipe the machine with a multi-purpose cleaner and a damp cloth. For safety reasons: do not spray or water with high pressure when cleaning the machine

Tube flushing machine. So as not to cause electronic parts failure.

8. Check the wear condition of the brush skirt and replace it if it is worn or damaged.
9. Charge the battery. In order to extend the life of the battery and ensure the best performance of the machine, it must be used in the machine over time.

Battery charging can take more than 30 minutes.

Monthly maintenance (every 80 hours of use)

1. Remove the solution filter from the underside of the machine and clean the filter. Be sure to empty the solution tank before removing the filter.
2. Clean the top of the battery to prevent electrode corrosion (see "Battery Maintenance").
3. Check if the battery wiring is loose.

4. Inspect and clean the recovery tank cover seal. Replace if damaged.
5. Spray the silicone dry lubricant on all the pivots and rollers, and then cover with a layer of waterproof lubricant to keep the axle

Smooth operation.

6. Check that the nuts and bolts on the machine are loose.
7. Check the machine for leaks.

Quarterly maintenance

Check the carbon brush wear of the drive motor (drive model), vacuum motor and brush motor every 250 hours. When the length of the carbon brush wears within 10 mm, a carbon brush is required. If the machine needs to be repaired, please contact an authorized service center.

Warning: Risk of electric shock. Disconnect the battery before servicing the machine.

Handling machine

When transporting the machine with a truck or trailer, be sure to follow the bundle procedure below:

1. Raise the brush head to the carrying position.
2. Load the machine using the recommended loading and unloading deck.
3. Hold the front of the machine against the front of the truck or trailer. Once the machine is in place, lower the brush head and turn the key to the closed position.
4. Place an obstacle behind each drive wheel to prevent the machine from slipping.
5. Secure the top of the machine with a rope to prevent tilting. You must install a bracket on the truck or trailer board. For safety reasons: When transporting the machine, use the recommended loading floor to load and unload the machine from the truck or trailer and secure the machine to the board with a rope.

Storage machine

1. Charge the battery before storing. Do not store in a depleted state.
2. Drain the sink box from the sink thoroughly and rinse it off.
3. Store the machine in a dry place and keep the brush head in the raised position.
4. Open the recovery tank cover for ventilation. Note: Do not expose the machine to rain and store it indoors.
5. If storing the machine in a cold environment, do drain all the liquid inside the machine.

Packing size:



Troubleshooting

problem	reason	Solution
The machine cannot be operated	The battery is not charged	Charge the battery
	Battery failure	replace the battery
	Battery wiring is loosed	tighten battery wiring
	Main fuse blows out	Change the wrong fuse
The brush motor does not work	The brush head rises off the ground.	Lower the brush head
	Battery meter lock is not activated	Battery charging
	Brush motor circuit breaker triggers jumper reset brush circuit breaker button	Reset brush circuit breaker button
	Brush (up/down) switch failure	Please contact the service center
	Motor carbon brush wear	Please contact the service center
Vacuum motor does not work	The squeegee rises off the ground	lower the squeegee

	Vacuum motor fuse blown	Replace the fuse
	Vacuum motor or wiring failure	Please contact the service center
	Motor carbon brush wear	Please contact the service center
Small or no water flow	Clean water tank filter or solution tube blocked	Clean water tank filter
	Flow control knob flow rate setting is too low	Adjust water flow control knob
	Loosen the knob of the control knob	Lubricate the knob and tighten the screw
Low efficiency in recycling waste water	The sewage tank is full	Drain the sewage tank
	Absorbent rubber strip wear	Replace water absorbent strip
	The suction pipe is blocked	Remove the clogged debris
	Damage to the sewage tank seal	Replace the seal
	Vacuum motor failure	Please contact the service center
Shortened running time	The battery is defective	Replace the battery
	Battery charging failure	Repair or replace the charger

Technical Parameters

NO.	Item Name	Unit	SJ860
1	Cleaning width	mm	850
2	Cleaning efficiency	m ² /h	6000
3	Squeegee width	mm	1200
4	Continuous operation time	H	6-8
5	Climb	°	<25°
6	Water tank	L	150
7	Sewage tank	L	165
8	Brush motor	W	500*2
9	Noise level	dB(A)	60
10	Battery	V	24
11	Machine size	mm	1600*1100*1450
12	Machine weight	kg	445KG

**Manufacturer: Shanghai Jianghuai Environmental Equipment
Co.,LTD**

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District,Shanghai**

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