

Operation And Maintenance MANUAL



APPLICABLE MODELS:
WALK-BEHIND FLOOR SCRUBBER,
MODEL L520B^{PRO}, L520BT^{PRO}, L520BQ, L600BT^{PRO}

Thank you for choosing UNISI products.

1. Manual Content

This user manual was prepared by the manufacturer and is considered an integral part of the machine. It contains all specific requirements regarding the proper and intended use of the produced machine.

Operating the machine in accordance with this manual ensures the safety of personnel and the machine. At the same time, it reduces operational wear, provides excellent floor cleaning results, and prolongs working service life. Failure to follow the instructions in this manual may cause personal injury, machine damage, damage to the floor surface, and harm to the surrounding environment.



Indicates that operations must be handled with extreme care and instructions must be clearly understood, otherwise it may lead to severe personal injury or even death.
Indicates that operations must be handled with care and instructions must be clearly understood, otherwise it may result in a series of adverse consequences such as damage to the machine or the operating premises, leading to financial loss.

2. Technical Information

1. Overview

This machine is a walk-behind scrubber dryer designed for cleaning floors in public spaces or industrial environments. It automatically completes both floor washing and wastewater recovery processes. The automatic scrubber dryer distributes a precise solution of fresh water and detergent onto the floor surface to wash away grime. When combined with the appropriate detergent and brushes, it can adapt to various floor types.

The machine is equipped with built-in clean water (solution) and recovery (wastewater) tanks. It can perform water suction and recovery simultaneously while cleaning. The suction function works via a vacuum system created by a suction motor installed inside the recovery tank, which draws dirty water from the floor through the squeegee assembly into the recovery tank.

2. Hazard Zones

A. Tank System: When using certified chemical detergents, avoid splashing into eyes or onto skin. Hazards may

also arise from collecting environmental contaminants (bacteria and chemical elements).

Removing the recovery

tank from the clean water tank may pose risks.

B. Control Panel: Risk of short circuits and electrical shock.

C. Brush Deck Bottom: Hazard caused by the rotating brush assembly.

D. Rear Wheels: Risk of crushing injuries between the rear wheels and the chassis frame.

E. Battery Compartment: Risk of short circuits at the poles and gas emissions during charging cycles.

3. Accessories

A. Nylon Brush: Used for general floor cleaning operations (Standard Configuration).

B. Pad Holder / Drive Plate: Used with the following floor pads (Optional Accessories):

- White Pad: Used for light cleaning and polishing on marble and smooth, sensitive surfaces.
- Red Pad: Used for standard daily floor cleaning.
- Black Pad: Used for stripping stubborn dirt and deep grime accumulation.

3. Safety Information

The manufacturer accepts no liability for personal injuries or property damage resulting from operations that violate these instructions.

1. The machine must only be operated by fully trained, authorized, and certified personnel who are familiar with all operating controls.
2. Minors are strictly prohibited from operating this machine.
3. This machine must not be used for any purpose outside its design scope. When operating in specialized environments (e.g., pharmaceuticals, hospitals, chemical industries, etc.), all local safety standards and guidelines must be rigorously followed.
4. The machine must not be used in pitch-black environments without lighting, explosive atmospheres, areas containing substances hazardous to human health, or any other unsuitable environments.
5. The working ambient temperature range for this machine is 30% to 95% relative humidity (Atmospheric constraints apply).
6. This machine must NOT be used to vacuum flammable or explosive liquids (such as gasoline, fuel oil, etc.), flammable gases, dry toxic dusts, or acids and solvents (such as volatile paints, acetone, etc.). Do not pick up burning or glowing objects.
7. If working on slopes with a slight gradient, never steer horizontally across the slope. Exercise extreme caution and do not reverse. When driving down a slope, take proper precautions to prevent the machine from tipping over. Avoid sudden acceleration. Always raise the brush deck and squeegee assembly when travelling on slopes.
8. The operator must never leave the machine unattended while the motors are running. Before leaving the machine, switch off all motor controls, disconnect the main power source, and lock it to prevent accidental movement.
9. Do not block or obstruct any ventilation or heat dissipation slots on the machine housing.
10. Never place hands or fingers inside any rotating or moving parts.
11. Do not use uncertified or inappropriate detergents. Follow all chemical safety guidelines explicitly. Keep detergents out of the reach of children.
12. Ensure that the power outlet used for the battery charger is properly grounded and equipped with a circuit breaker.
13. Batteries must be managed according to the battery manufacturer's guidelines and local environmental regulations. The battery surface must be kept meticulously clean and dry to prevent surface leakage and short circuits. Keep batteries clear of metal dust.
14. Never leave tools or metal items on top of the battery terminals, as this can cause a short circuit and trigger an explosion.
15. Strictly follow safety protocols when handling acid-based wet batteries.
16. Operating the machine in high magnetic fields may cause electronic control system malfunctions.
17. Never clean the machine by spraying it directly with high-pressure water guns or hoses.
18. Wastewater and detergents collected during operation must be disposed of strictly in accordance with local environmental legislation.
19. In case of a technical fault or loss of control during operation, turn off the machine immediately and contact authorized factory technicians as soon as possible.
20. All maintenance work must be performed in a well-spaced area with the battery terminals disconnected.
21. All electrical work and structural maintenance must be executed solely by certified technical

professionals.

22. Only use original factory-supplied accessories and spare parts to guarantee equipment safety and reliability. Never use parts scavenged from other machines.

23. After operation, turn off all power switches, drain all fluids completely, and clean the machine thoroughly.

24. The designed service life of this machine is 8 years. After this period, whether operational or not, it must be scrapped and recycled according to local statutory waste management regulations.



SPECIAL WASTE MUST BE SEPARATED FROM DOMESTIC REFUSE

- A. Alternatively, the machine can be returned to the manufacturer for complete refurbishment and disposal.
- B. When decommissioning the machine, spent batteries should be sent directly to a certified battery recycling and treatment center.
- C. Ensure all potentially hazardous or sharp parts are handled safely and secured away from children to prevent accidents.

4. Transport, Handling, and Installation

1. Transporting and Lifting the Machine (Including Packaging)



- During lifting and rigging operations, ensure the machine is securely strapped and anchored to avoid tipping or accidental falls.
- Forklift transport of the machine must be performed only in well-illuminated environments.
- The machine is bolted securely onto a wooden pallet base at the factory. Proper loading equipment must be utilized when placing it onto a transport vehicle. Upon arrival, identical compliant equipment must be used for unloading.
- When using a forklift to move the machine, it must be kept in its original packaging frame. Avoid any impacts or flipping actions during transit.

2. Inspection of Transported Equipment

Please inspect the machine and its packaging for any visible damage immediately upon delivery. If any structural damage is identified, report it to the transport carrier instantly and fill out an insurance compensation claim form.

3. Unpacking and Decrating



Personnel performing the unpacking sequence must wear appropriate Personal Protective Equipment (PPE) such as safety gloves and protective goggles to minimize injury risks.

Follow these steps to unpack the machine:

- Remove the outer cardboard carton or wooden crate frame.
- Depending on the specific machine model, unbolt and remove the metal brackets anchoring the machine chassis to the wooden pallet base.
- Cut open the sealing tape on the battery box compartment and verify that all standard

components are present:

- User Operation Manual
- Battery Connection Cables
- Utilize a suitable loading ramp to roll the machine down carefully from the wooden pallet onto flat ground.
- Clean the exterior of the machine according to standard safety regulations.
- After decrating, proceed to configure and install the power source according to instructions.

If possible, store the packaging materials safely for future long-distance transit or transport to an authorized repair center. Dispose of unwanted packaging components strictly according to local environmental rules.



These guidelines must be strictly adhered to; otherwise, severe personal injuries or hazards may occur, and all factory warranty rights will be completely voided.

4. Battery Installation

This equipment can be configured with three optional battery types:

Wet Cell Batteries (Flooded Lead-Acid): This type requires periodic maintenance. The electrolyte liquid level must be checked regularly. If the level falls below standard thresholds, top up with distilled water until the internal battery plates are fully submerged.

Gel Batteries: This type is completely sealed and maintenance-free. No fluid top-up is required. Note: Battery electrical specifications must fit precisely within the machine's technical parameter threshold. Using excessively heavy batteries can create unstable handling dynamics during cornering and cause motor overheating. Installing lower capacity batteries will lead to frequent charging intervals.

Lithium Batteries: Maintenance-free type. Battery parameters must match the machine's technical specifications and electrical gauge precisely.

A. Battery Safety Preparations:



During battery installation or maintenance procedures, operators must wear comprehensive safety gear (gloves, safety goggles, protective suits). Keep away from open flames, avoid bridging battery terminals, prevent sparks, and strictly prohibit smoking to eliminate explosion hazards.

Before operating the machine for the first time, charge the batteries completely using the prescribed sequence.

B. Battery: Installation and Connection

1. Verify that all operational switches on the control panel are turned to the "0" (OFF) position.
2. Ensure the battery cable marked with a red "+" terminal is fixed onto the positive pole. Never perform electrical inspection near open flames or sparks. Follow steps precisely; short-circuiting battery cells can trigger a severe explosion.
3. Ensure both water tanks are completely drained before proceeding.
4. Tilt the recovery wastewater tank outwards to gain access to the battery compartment bed.
5. Place the batteries carefully into the compartment.
6. Verify that the total battery mass is acceptable for your model configuration. Note that positive and negative terminal posts feature distinct diameters.
7. Tighten all nuts on the battery connection cables according to the wiring schematic and coat terminal assemblies with protective petroleum jelly (Vaseline).



Return the wastewater tank smoothly to its normal operational layout position. Always ensure battery weights align with safety ratings. Never deep-discharge the batteries, as this causes permanent, irreversible structural cell damage.

5. Transportation and Machine Lifting



All transport operations must be executed in well-lit environments. Personnel must wear standard protective wear and strictly observe safety guidelines.

To prepare the machine for shipping after crating, follow these steps:

- Drain the clean solution tank and the dirty water recovery tank completely.
- Remove the squeegee tool and the floor brush deck assembly (or pad driver).
- Disconnect and remove the battery packs.
- Position the machine chassis onto the wooden deck base, and secure it with structural metal brackets and packaging tie straps.
- Load the pallet assembly onto the transport vehicle using a forklift.
- Strap the machine assembly securely onto the truck bed with heavy-duty cargo straps.

5. User Operation Instructions

1. Control Panel and Components Overview



Figure 1: L520B Pro Control Panel

- ① Recovery Tank Full Indicator Light
- ② Brush Deck Power Switch
- ③ Battery Charge Gauge / Indicator
- ④ Dual Brush Activation Lever Handles (Squeeze handles to rotate brush)



Figure 2: L520BQ Control Panel

- ① Recovery Tank Full Indicator Light
- ② Brush Deck Power Switch
- ③ Battery Charge Gauge / Indicator
[Silent button located independently on the chassis]



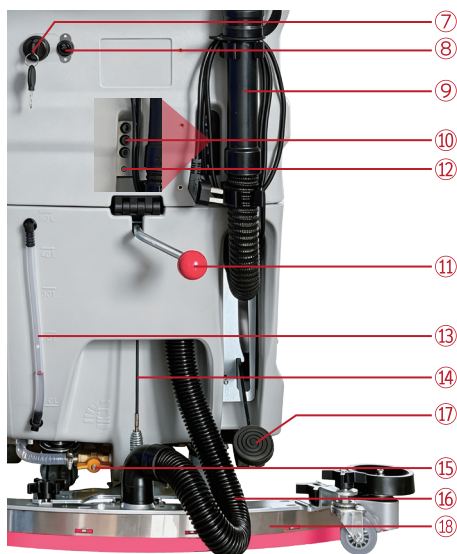
Figure 3: L520BT^{Pro} / L600BT^{Pro} Drive Model Control Panel

- ① Recovery Tank Full Alert Light
(Flashes when tank requires draining)
- ② Forward / Reverse Speed Adjustment Knob
(Turn left towards tortoise for slow, right towards rabbit for fast)
- ③ Brush Deck Power Switch
- ④ Battery Charge Level Indicator
- ⑤ Dual Activation Drive Handles
(Squeeze handles to engage brush rotation and forward traction)

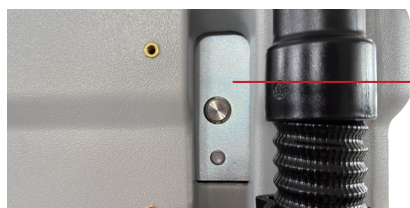
Figure 4: Machine Component Nomenclature



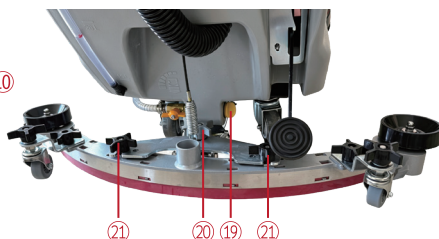
- ⑥ Water Fill Inlet:
Fill with clean water. Add low-foaming liquid detergent if removing oil stains. Never use solids.



- ⑦ Main Key Switch: Controls master system electrical power on/off.
- ⑧ Forward/Reverse Direction Switch: Available exclusively on traction drive models (BT-Series Models).
- ⑨ Drain Hose: Used to dump wastewater from the recovery tank.
- ⑩ Overload (BT-Series Models) / Silent Toggle Button: Controls silent mode execution on relevant variants.
- ⑪ Squeegee Lifting Handle: Manual lever to raise or lower the suction assembly.
- ⑫ Charging Status LED: Displays battery charger cycle progress.
- ⑬ Clean Water Level Tube: Translucent sight line showing fluid level inside solution tank.
- ⑭ Squeegee Lift Cable: Heavy mechanical link raising the rear assembly.
- ⑮ Water Flow Control Valve: Manually adjusts liquid distribution volume to the floor.
- ⑯ Suction Vacuum Hose: Connects squeegee intake nozzle to the wastewater tank.
- ⑰ Brush Deck Pedal: Foot pedal to raise or lock down the main scrub head.
- ⑱ Squeegee Assembly: Rear floor tool containing rubber blades to pick up solution.



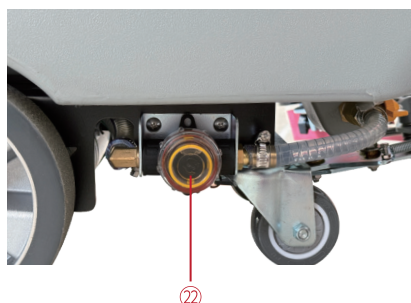
L520BQ 静音按钮位置



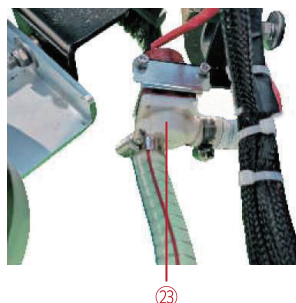
①⑨ Fresh Water Drain Port (Drain when machine is not in use at 0°C)

②⑩ Squeegee Tilt Adjustment Knob

②⑪ Squeegee Height Adjustment Wheel



②②



②③



②④

②⑤

②⑥

②② Fresh Water Filter
(If no water flows from the brush disc, clear debris here in a timely manner)

②③ Solenoid Valve

②④ Recovery Tank Lid Seal

②⑤ Support Rod

②⑥ Filter Dust Sleeve
(Prevent dust from entering the motor)

2. Pre-Operation Checklist

Before starting operations, check the following components systematically:

- Battery System: Verify charge status gauge. If capacity indicates low, charge prior to work.
- Recovery Tank: Verify tank is completely empty. Empty any existing water.
- Scrub Brushes: Verify floor scrub brush or pad driver is safely locked in position.
- Suction Mechanism: Ensure vacuum hoses and rear squeegee tool are clamped tight, and blades show no cracks.

Model L520B^{Pro} Operating Steps:

1. Tilt back the wastewater tank and establish battery connection couplers securely.
 2. Fill the clean water solution tank through inlet ⑥ with water or pre-diluted chemical solution.
- CRITICAL: Prohibit laundry powder, soap bars, or high-foaming detergents. Use low-foaming

liquids only.

3. Mount the floor brush and squeegee tools, then lower both components using their mechanical lift levers.
4. Adjust the manual fluid valve ⑮ to set the liquid volume flowing onto the floor.
5. Turn the main key switch ⑦ to "1" (ON), activate the brush motor switch, and lower the squeegee handle.
6. Grasp the dual switch lever handles ④ on the handrail. The machine will start scrubbing. If water collection is uneven, adjust the squeegee pitch knob ② and castors 21 until dry tracks appear. If light ① flashes accompanied by a buzzer alarm, stop immediately and drain the recovery tank.
7. Upon completion, turn off key switch ⑦, turn off brush motor switch, lift the squeegee assembly ⑩, push the unit to a proper drain station, and empty the tank via drain tube ⑨.
8. Rinse the interiors of both tanks and clean the squeegee assembly blades.
9. If the battery meter ③ drops to the final two indicator bars, connect the unit to the charger for 7 to 10 hours.

Model L520BQ (Silent Variant) Operating Steps:

1. Open the recovery tank deck and establish battery connections safely.
2. Add fresh solution into water inlet ⑥ (strictly use low-foam formulation liquids).
3. Install the brush disk and squeegee tool, then drop them into their lower operating positions.
4. Regulate solution output volume using flow valve ⑮.
5. Turn on master key ⑦, push brush switch, and lower squeegee lever ⑩ to begin floor operations.
6. To activate decibel reduction for quiet work zones, engage the specialized Silent Toggle Switch ⑩.
7. Optimize squeegee blade angle if streaks or moist residue are observed on the floor. If warning lamp ① flashes, empty the recovery tank immediately.
8. When finished, turn off all control switches, raise the mechanical assemblies, and dump dirty liquid via tube ⑨. Clean all residues, and charge the battery when the capacity indicator indicates empty.

Models L520BT^{Pro} / L600BT^{Pro} (Traction Drive Variants) Operating Steps:

1. Verify correct battery polar linkages under the recovery tank compartment tray.
2. Fill the fluid solution tank through water fill port ⑥ using correct chemical mixture constraints.
3. Lower the scrub deck head and the rear squeegee collection frame onto the ground.
4. Set the desired water volume distribution via valve ⑮.
5. Turn on the master electrical system key ⑦ and engage the brush drive switch. Drop the squeegee assembly.
6. Flip the traction control lever ⑧ to the forward position and turn the velocity speed control dial ② to a safe level (Turn left towards the tortoise icon for slow, or right towards the rabbit icon for fast).
7. Grasp the activation handle loops ⑤ to initiate auto-scrubbing and forward power drive. Adjust the trailing squeegee frame angle if water pickup is imperfect. If indicator ① alerts, drain the recovery tank immediately.
8. At the end of the shift, switch off keys, disengage the brush motor, raise all floor tools, and dump the recovery water using hose ⑨. Perform standard clean-down and maintain the battery packs via charger line.

6. Operational Field Recommendations

1. Squeegee Assembly Installation and Calibration

The rear squeegee tool collects dirty liquid from the floor. Follow these installation steps:

- Raise the trailing mounting bracket lift assembly to its storage position.
- Slide the vacuum hose coupler firmly over the intake neck (Secure tube ⑬) onto squeegee housing ⑭).
- Position the squeegee assembly onto the mounting pins of the trailer arm, adjust the angle, and tighten the holding knobs.
- The integrated rubber blades scrape wastewater and chemicals off the floor. Long-term abrasion will dull and tear the contact edges, degrading suction quality. Inspect blades frequently and reverse or replace them when worn.

For optimal performance, the rear rubber edge should maintain an approximate 45-degree angle relative to the floor while moving. Adjust the small guide wheel height assemblies to vary down-force pressure profiles.

2. Equipment Transit When Non-Operational

To move the unit between work areas without scrubbing:

- Raise the rear squeegee frame fully off the floor.
- Raise the main brush disk deck into its locked travel stance.
- On self-propelled variants, select forward or reverse direction, and engage handles to drive.

3. Brush Assembly Installation and Ejection



Never run the scrub system without a brush disc or pad assembly securely locked onto the motor drive hub.

The system accommodates both automatic spin-on attachment methods and standard manual loading sequences.



First-time operators must practice machine handling maneuvers in an open, obstacle-free training area.

Always empty the recovery wastewater tank completely before refilling the fresh water solution tank.

To maintain premium scrubbing results and maximize service life, adhere to these simple rules:

- Clear the floor area of solid debris, ropes, or large obstructions before starting work.
- Schedule deep cleaning shifts during low foot-traffic hours to prevent immediate re-soiling.
- Steer the machine in long, straight parallel rows whenever possible.
- Clean tight corners or wall recesses manually using a hand mop or detail cloth.



Never leave the machine running unattended. If the recovery tank reaches maximum volume capacity, the mechanical float sensor or sensor system shuts down suction vacuum airflows immediately to safeguard internal components. Empty the wastewater tank and reset before continuing. To avoid floor finish damage, do not spin the scrub brushes while the machine is standing still in one spot.

Ending Operations:

Disengage the brush deck power switch to stop brush rotation and raise the deck. Turn off the vacuum suction system and lift the trailing squeegee frame to avoid rubber blade deformation. Transport the unit to a disposal station, empty the recovery tank completely, and rinse out all sediment buildup.

4. Cleaning Recommendations

Turn off the brush disk switch to lift and stop the brushes. Turn off the suction switch and raise the squeegee to prevent rubber blade deformation. Clean and fully drain the dirty water tank. For stubborn stains on the floor, operate the scrubbing and suction functions separately.

A. Pre-scrub

Turn on the water discharge switch

Turn on the brush disk switch

Raise the squeegee

Start cleaning

This method allows detergent to fully penetrate stains for optimal cleaning results.

B. Suction & Drying

After pre-scrubbing, lower the squeegee and activate the suction switch. Scrub the floor again while removing residual water.

5. Waste Water Drainage

Turn off the brush disk switch to lift and stop the brushes. Turn off the suction switch and raise the squeegee to prevent rubber blade deformation. Clean and fully drain the dirty water tank. For stubborn stains on the floor, operate the scrubbing and suction functions separately.

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After pre-scrubbing, lower the squeegee and activate the suction switch. Scrub the floor again while removing residual water.



Before refilling the clean water tank, fully drain the dirty water tank first.

Operators shall wear proper protective gear. Disconnect the power supply before draining wastewater.

7. Long-Term Equipment Storage Protocols

If the machine is scheduled to remain idle for an extended period, follow these conservation rules:

- Remove the floor scrub brush disk and the rear squeegee assembly frame entirely. Clean them and store in a dry location.
- Drain both water tanks completely, flush out residues, and keep tank lids open to let interiors dry, avoiding mildew and odors.
- Perform a complete, uninterrupted battery charging cycle before placing the machine into storage.
- While in storage, batteries must be recharged once every single month to prevent deep self-discharge damage and irreversible capacity losses. Store the machine inside a climate-controlled, dry room.

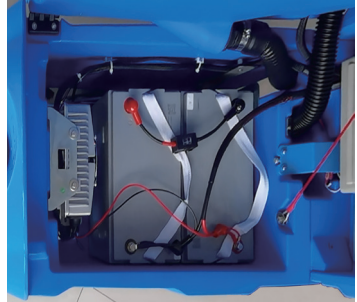
8. Battery Care and Charging Procedures



Wear appropriate personal protective gear (acid-resistant gloves, face shielding goggles, protective overalls) during battery inspection. Keep away from fire or sparks. Do not short terminals with metal tools. Do not smoke. Perform all charging cycles in well-ventilated, airy environments. To avoid permanent cell degradation, never drain the battery capacity completely.

When the control panel battery empty light starts flashing, stop work immediately and drive the machine to a charging station.

Charging Sequence: Insert the charger output plug into the chassis receptacle first, then plug the input line into the mains wall socket. Once the charge cycle completes automatically, disconnect the AC input line before uncoupling the machine plug. Verify that all terminal connection nuts are torqued down securely to eliminate high-resistance arcing hazards, and pull the color-coded insulation boot sleeves over the terminal posts.



9. Machine Maintenance and Guidance



Always disconnect the master battery couplers and remove the ignition key before performing any cleaning, troubleshooting, or maintenance work on the machine.

All complex electrical and powertrain maintenance tasks must be carried out by fully qualified, factory-trained technical specialists adhering to electrical safety regulations.

1. Maintenance - General Overview

Adhering to standard maintenance schedules extends equipment operational life and ensures high-efficiency cleaning. Follow these general machine cleaning constraints:

- DO NOT use high-pressure wash-down guns or power washers. Water can easily penetrate control housing seams and motor seals, causing short circuits, electrical failures, or complete motor burnout.
- Never apply direct steam cleaning loops to the machine bodies; high heat can warp or melt plastic tank walls and fairings.
- Do not use organic chemical solvents, hydrocarbons, or thinners on rubber seals or gaskets, as they degrade and decompose elastomeric elements.

2. Routine Maintenance

1) Cleaning of Suction Motor Filter and Float Sensor

Drain all wastewater from the dirty water tank.

Clean the sensor; do not spray water directly onto it.

Remove and clean the filter.

Replace the filter at the suction inlet once fully dry.

Refit the dirty water tank cover.

2) Cleaning of Clean Water Tank Filter

Take out the inlet filter from the clean water tank.

Rinse the filter with water.

Reinstall the filter.

3) Squeegee Rubber Blade Replacement

The rubber blade is mounted on the squeegee to recover wastewater and detergent from the floor. It wears out over time due to friction and impairs suction performance. Inspect it regularly.

Replacement steps:

Turn off the suction switch and lower the squeegee.

Loosen the two star-shaped knobs and detach the squeegee from the bracket.

Disconnect the suction hose from the squeegee.

Loosen the two screws and remove the plastic fasteners.

Take out the rubber blade.

The blade can be reused on all four sides. Replace it with a new one after all sides are worn.

Reassemble the fixing bracket.

Fasten the latches securely.

4) Fuse Replacement

The fuse protects the brush motor and suction motor, housed in the fuse box inside the control panel.

Tilt up the dirty water tank; drain all water inside first if present.

Unscrew the nut of the fuse box and remove the faulty fuse.

Fit a new fuse and reassemble the fuse box.

Put the dirty water tank back in place.



Never install higher amperage fuses or bridge blown terminals with wire. If replacement fuses continue to blow repeatedly, stop operations immediately. This indicates a severe electrical short circuit or motor hardware failure. Contact a certified service technician.

5) Daily Maintenance

Carry out maintenance according to the instructions below after each-day operation:

Drain all wastewater from the recovery tank.

Clean and inspect the condition of the squeegee blades. Replace them if necessary.

Check whether the squeegee air inlet is blocked; remove blockages if required.

Charge the battery in accordance with the instructions.

6) Weekly Maintenance

Clean the float switch inside the recovery tank to ensure proper operation.

Clean the vacuum-motor filter and check for damage; replace it if necessary.

Clean the filter screen at the front of the fresh-water tank and inspect for damage; replace it if necessary.

Clean the suction hose.

Clean the fresh-water tank and recovery tank.

7) Semi-Annual Maintenance

Have a qualified technician inspect the machine's electrical system.

10. Troubleshooting and Fault Resolution Matrix

Possible Faults & Troubleshooting

Symptom	Potential Cause	Recommended Solution
Machine fails to turn on / no power	Battery power couplers are disconnected.	Check and reconnect the battery plugs firmly.
	Battery capacity is depleted.	Perform a full battery charging cycle.
	Master ignition key switch is at "0" position.	Turn the master key switch to the "1" position.
Brush motor will not start	Brush motor has overheated and tripped internal thermal protection due to overload.	Release drive handles, toggle brush switch to "0", and let motor cool down for at least 45 minutes.
	Brush motor protection fuse has blown.	Investigate the overload root cause, then replace with a fuse of matching rating.
	Battery charge is completely exhausted.	Recharge the battery packs.
	Gearbox or primary drive motor is damaged.	Contact service center to replace the gearbox or motor.
Uneven floor cleaning results	Scrub brush bristles or floor pads are heavily worn down.	Install a brand-new replacement brush disk or floor pad.
No water flows to the scrub brush	Manual solution flow valve is turned off.	Open the water delivery flow valve.
	Clean water solution tank is empty.	Refill the clean water tank.
	Solution delivery line or filter is clogged.	Clean out the water line and inline filter assembly.
	Water solenoid valve is damaged or jammed.	Replace the water solenoid valve component.
Water flow will not stop	Manual ball valve or flow mechanism is broken.	Replace the faulty water ball valve assembly.
Vacuum suction motor fails to run	Vacuum suction power switch is turned off.	Lower the squeegee lifting handle to trigger microswitch activation.
	Mechanical activation microswitch is faulty.	Inspect and replace the microswitch assembly.
	Motor wiring harness is loose or vacuum motor is damaged.	Check power linkages. Replace vacuum motor if internal windings are burned out.
	Suction system electrical fuse has blown.	Identify overload cause and replace with a matching fuse.
	Recovery wastewater tank is completely full.	Drain the wastewater tank via the drain tube.
Poor water pick-up / wet streaks on floor	Squeegee rubber blades are nicked, dulled, or worn.	Reverse or replace the rubber squeegee blades.
	Suction hose or vacuum intake nozzle is clogged.	Clear obstructions from the suction pipe and squeegee tool.
	Tank float sensor has tripped or is dirty.	Empty the recovery tank or clean the electronic sensor pins.
	Vacuum hose is loose or structurally ruptured.	Tighten connection cuffs or install a new vacuum hose.

Poor water pick-up / wet streaks on floor	Squeegee rubber blades are nicked, dulled, or worn.	Reverse or replace the rubber squeegee blades.
	Suction hose or vacuum intake nozzle is clogged.	Clear obstructions from the suction pipe and squeegee tool.
	Tank float sensor has tripped or is dirty.	Empty the recovery tank or clean the electronic sensor pins.
	Vacuum hose is loose or structurally ruptured.	Tighten connection cuffs or install a new vacuum hose.
	Vacuum motor lacks power or is malfunctioning.	Check voltage inputs. Replace motor if performance has degraded.
Battery runtime is shorter than normal	Battery posts or terminal clamps are oxidized or dirty.	Clean all terminal posts and apply a coat of protective Vaseline.
	Electrolyte fluid level in wet cells is low.	Top up cells with distilled water according to instructions.
	Battery charger is malfunctioning.	Consult charger manual and test charger output voltage.
	A battery cell is shorted or completely dead.	Replace the faulty battery cell or pack.
New battery has short runtime	New battery has not reached optimal capacity.	New batteries require 20–30 full charge/discharge cycles to reach maximum capacity.
Batteries fail to charge	AC power cord or charger coupler is loose.	Verify and secure all plug connections.



All the contents of this manual have been carefully checked. If there are any printing errors or misunderstandings regarding the content, our company reserves the right to explain.

If there are any technical improvements to the product, they will be included in the new quality manual and no further notice will be given.

The appearance and color of the product may be subject to change. In case of any modification, the actual product shall prevail.

WUXI UNISI CLEANING EQUIPMENT MANUFACTURING CO., LTD

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