Shiwosi

史 沃 斯



# 驾驶式洗地机

# 【Ride-on Floor Scrubber】

V8

使用本机器前请充分阅读并理解本说明书，请妥善保存以供日后参考。

Please read and understand this manual thoroughly before using the machine,and keep it properly for future reference.

# 前言【Foreword】

本使用说明书为每台新型号机器的标配文件，旨在提供必要的操作指导与维护规程。为确保机器安全高效运行，在操作或进行维护作业前，必须通读并透彻理解本说明书全部内容。

This instruction manual is a standard accessory for each new model of the machine,designed to provide necessary operational guidance and maintenance procedures.To ensure the safe and efficient operation of the machine,the entire content of this manual must be read and fully understood before any operation or maintenance work.

本机器设计旨在提供长期可靠的服务，若需以最低成本达成最佳使用效果，应严格遵循以下要求:
The machine is engineered for long-term and reliable service.To achieve the optimal performance at the lowest cost,the following requirements must be strictly followed:

- 操作机器时需谨慎合理，避免因误操作导致机器损坏或性能下降;
  Operate the machine carefully and rationally to avoid damage or performance degradation caused by misoperation.
- 按照本说明书规定的维护周期及项目进行定期保养;
  Carry out regular maintenance in accordance with the maintenance cycles and items specified in this manual.
- 维修时仅可使用制造商提供的原装配件或经认证的等效替代件。
  Only use original spare parts provided by the manufacturer or certified equivalent replacement parts for repairs.

## 保护环境【Environmental Protection】



请依据您当地的废弃物处理法规，在维护环境安全的前提下，丢弃包装材料、电瓶等老旧机器组件、防冻剂和油料等有毒液体。

Please dispose of packaging materials,old machine components such as batteries,and toxic liquids including antifreeze and oil in accordance with local waste disposal regulations,under the premise of ensuring environmental safety.



请务必做好回收工作。

Please make sure to conduct proper recycling work.

# 预期用途【Intended Use】

本驾驶式洗地机适用于商业场景，例如酒店、学校、医院、工厂、商铺、办公楼及租赁行业。其设计用途为在室内环境中擦洗硬质地面(如混凝土、瓷砖、石材、合成材料等)。

This ride-on floor scrubber is suitable for commercial scenarios suchas hotels,schools,hospitals,factories,shops,office buildings and the rental industry.It is designed to scrub hard floors (e.g.,concrete,ceramic tiles,stone,synthetic materials,etc.) in indoor environments.

⚠**警告：** 不得用于清洁地毯或打磨木质地板。

**Warning:** Do not use to clean carpets or sand wooden floors.

⚠**警告：** 严禁超出本使用说明书规定的范围使用本机器。

**Warning:** It is strictly forbidden to use the machine beyond the scope specified in this instruction manual.

⚠**注意：** 仅可使用推荐的百洁垫、刷子及适用于本机器的市售地面清洁剂。

**Note:** Only use recommended scouring pads,brushes and commercially available floor cleaners suitable for this machine.

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# 1 安全规范【Safety Regulations】

**请阅读并理解全部说明！【Please read and understand all instructions!】**

⚠**危险：**本机器存在造成严重人身伤害、死亡或爆炸风险的危险情形。为防止严重伤害，必须严格遵守本说明书中的所有安全说明。

**Danger:** Hazardous situations exist with this machine that may cause serious personal injury,death or explosion.To prevent serious harm,all safety instructions in this manual must be strictly followed.

⚠**警告：**使用未经批准或非史沃斯品牌的配件可能导致过热、机器损坏及安全隐患。

**Warning:** The use of unapproved or non-Shiwosi brand accessories may cause overheating,machine damage and potential safety hazards.

## 1.1 安全警告【Safety Warnings】

- 操作机器前务必阅读本说明书。
  Be sure to read this manual before operating the machine.
- 禁止用于清洁易燃材料或活性金属(如镁、铝粉)。
  Do not use the machine to clean flammable materials or reactive metals (e.g., magnesium,aluminum powder).
- 禁止在易燃液体、蒸汽或可燃粉尘环境中使用。本机器未配备防爆电机，启动及运行时产生的电火花可能引发闪燃或爆炸。
  Do not use the machine in environments with flammable liquids,vapors or combustible dust. This machine is not equipped with an explosion-proof motor,and electric sparks generated during startup and operation may cause flash fire or explosion.
- 清洁或维修机器前，必须断开电池电缆及充电器电源线。
  The battery cable and charger power cord must be disconnected before cleaning or repairing the machine.
- 禁止使用线缆破损的充电器，禁止改装插头。若充电器电源线损坏，必须由制造商、授权服务代理商或同等资质人员更换，以避免安全隐患。
  Do not use a charger with a damaged cable,and do not modify the plug. If the charger power cord is damaged,it must be replaced by the manufacturer,authorized service agent or qualified personnel to avoid potential safety hazards.
- 禁止在户外使用，机器需存放于室内。
  Do not use the machine outdoors; the machine must be stored indoors.
- 清洁垫/刷高速旋转时，严禁手部靠近。
  Keep hands away when the cleaning pad/brush is rotating at high speed.

## 1.2 安全须知【Safety Notes】

- 严禁在以下情况操作机器:

  It is strictly forbidden to operate the machine under the following circumstances:

  - 未经过培训及授权的人员;

    Untrained and unauthorized personnel;

  - 未阅读并理解本使用说明书全部内容;

    Personnel who have not read and understood the entire content of this instruction manual;

  - 身体或精神状态无法执行机器操作指令;

    Personnel whose physical or mental state is unable to execute machine operation instructions;

  - 受酒精或药物影响;

    Personnel under the influence of alcohol or drugs;

  - 操作时使用手机或其他电子设备;

    Using mobile phones or other electronic devices during operation;

  - 机器未处于正常工作状态(如部件损坏、功能异常);

    The machine is not in normal working condition (e.g., damaged parts,abnormal functions);

  - 户外环境(本机器仅限室内使用);

    Outdoor environment (this machine is for indoor use only);

  - 存在易燃蒸汽/液体或可燃粉尘的区域;

    Areas with flammable vapors/liquids or combustible dust;

  - 使用非史沃斯提供或认可的清洁垫/配件(第三方配件可能导致安全防护失效);

    Using cleaning pads/accessories not provided or approved by Shiwosi (third-party accessories may cause failure of safety protection);

  - 存在物体坠落风险的区域;

    Areas with the risk of falling objects;

  - 光线过暗，无法清晰辨识控制面板或安全操作路径的区域。

    Areas with insufficient light to clearly identify the control panel or safe operation path.

- 启动机器前必须执行以下检查:

  The following inspections must be performed before starting the machine:

  - 检查机器是否存在液体泄漏(如污水、清洁剂);

    Check the machine for liquid leaks (e.g., sewage,cleaning agent);

  - 确认所有安全装置安装到位且功能正常。

    Confirm that all safety devices are installed in place and function normally.

- 机器运行时需严格遵守以下要求:

  The following requirements must be strictly followed when the machine is in operation:

  - 仅可按照本说明书规定的方式使用;

    Only use the machine in the manner specified in this manual;

  - 发现机器损坏或异常运行时，立即停止操作并报告;

    Stop operation immediately and report if the machine is damaged or running abnormally;

  - 佩戴不露趾、防滑工作鞋;

    Wear closed-toe,non-slip work shoes;

  - 转弯时降低速度;

    Reduce speed when turning;

  - 在斜坡或湿滑地面行驶时缓慢操作;

    Operate slowly when driving on slopes or slippery floors;

  - 禁止在坡度超过5%(3°)的斜坡上擦洗或运输机器;

    Do not scrub or transport the machine on slopes with a gradient exceeding 5% (3°);

  - 遵循作业现场关于湿滑地面的安全警示规范(如放置 “小心地滑"标识);

    Follow the safety warning specifications for slippery floors at the operation site (e.g.,place "Caution: Slippery Floor" signs);

  - 严格按照化学品容器上的说明进行配比、搬运及废弃处理;

    Carry out proportioning,handling and disposal in strict accordance with the instructions on chemical containers;

  - 防止儿童及未授权人员靠近机器，禁止将机器作为玩具使用。

    Prevent children and unauthorized personnel from approaching the machine,and do not use the machine as a toy.

- 离开或维修机器前必须执行以下操作:

  The following operations must be performed before leaving or repairing the machine:

  - 将机器停放在水平地面;

    Park the machine on a level ground;

  - 关闭机器电源并拔出钥匙。

    Turn off the machine power and pull out the key.

- 维修作业必须遵守以下规范:

  Maintenance work must comply with the following specifications:

  - 开始维修前，务必断开电瓶连接线及充电器电源线;

    Be sure to disconnect the battery connection line and charger power cord before starting maintenance;

- 维修区域需照明充足、视野清晰;

  The maintenance area must be well-lit and have a clear visibility;

- 所有维修工作必须由经过培训的专业人员执行;

  All maintenance work must be performed by trained professionals;

- 仅可使用史沃斯提供或认可的原装替换部件;

  Only use original replacement parts provided or approved by Shiwosi;

- 严禁擅自改装机器原始设计;

  It is strictly forbidden to modify the original design of the machine without permission;

- 避开运动部件，维修时禁止穿戴宽松衣物或首饰，长发需束起;

  Keep away from moving parts; do not wear loose clothes or jewelry during maintenance,and tie up long hair;

- 禁止使用不兼容的电瓶充电器(可能损坏电瓶并引发火灾风险)

  Do not use incompatible battery chargers (which may damage the battery and cause fire risk);

- 定期检查充电器线缆是否有破损;

  Regularly check the charger cable for damage;

- 维修区域需保持良好通风;

  The maintenance area must be well-ventilated;

- 避免接触电池酸液;

  Avoid contact with battery acid;

- 禁止金属物体放置于电池表面;

  Do not place metal objects on the battery surface;

- 禁止使用高压水枪冲洗机器;

  Do not clean the machine with a high-pressure water gun;

- 搬运电池时需使用起重机器或足够人力协助;

  Use hoisting equipment or sufficient manpower to assist when handling the battery;

- 电瓶安装必须由经过培训的人员操作;

  Battery installation must be operated by trained personnel;

- 按本说明书要求佩戴个人防护装备，包括防护手套和护目镜等。

  Wear personal protective equipment as required by this manual,including protective gloves and goggles.

- 机器装卸(上下卡车/拖车)过程必须遵守以下要求:

  The following requirements must be complied with during machine loading and unloading (on and off trucks/trailers):

- 装载前需排空水箱;

  Empty the water tank before loading;

- 使用能承受机器及操作人员总重量的坡道、卡车或拖车;
  Use ramps, trucks or trailers that can bear the total weight of the machine and the operator;
- 机器仅可在坡度不超过5%(3°)的坡道上行驶;
  The machine can only be driven on ramps with a gradient not exceeding 5% (3°);
- 固定机器前，需降下刷盘及吸水扒;
  Lower the brush disc and water suction rake before fixing the machine;
- 关闭机器电源并拔出钥匙;
  Turn off the machine power and pull out the key;
- 使用轮挡固定车轮;
  Use wheel chocks to fix the wheels;
- 用绑带紧固机器，防止运输中移位。
  Fasten the machine with strapping to prevent displacement during transportation.

# 2 产品介绍【Product Introduction】

## 2.1 产品清单【Product List】

| 物料名称【Material Name】 | 数量【Quantity】 |
| --- | --- |
| V8驾驶式洗地机（V8 Ride-on Floor Scrubber） | 1台（1unit） |
| 说明书（Instruction Manual） | 1份（1pcs） |
| 保修卡（Warranty Card） | 1份（1pcs） |
| 合格证（Qualification Certificate） | 1份（1pcs） |

⚠ **注意：** 请检查上述机器及配件是否存在运输损坏迹象。

**Note:** Please inspect the machine and its accessories for any signs of transit damage.

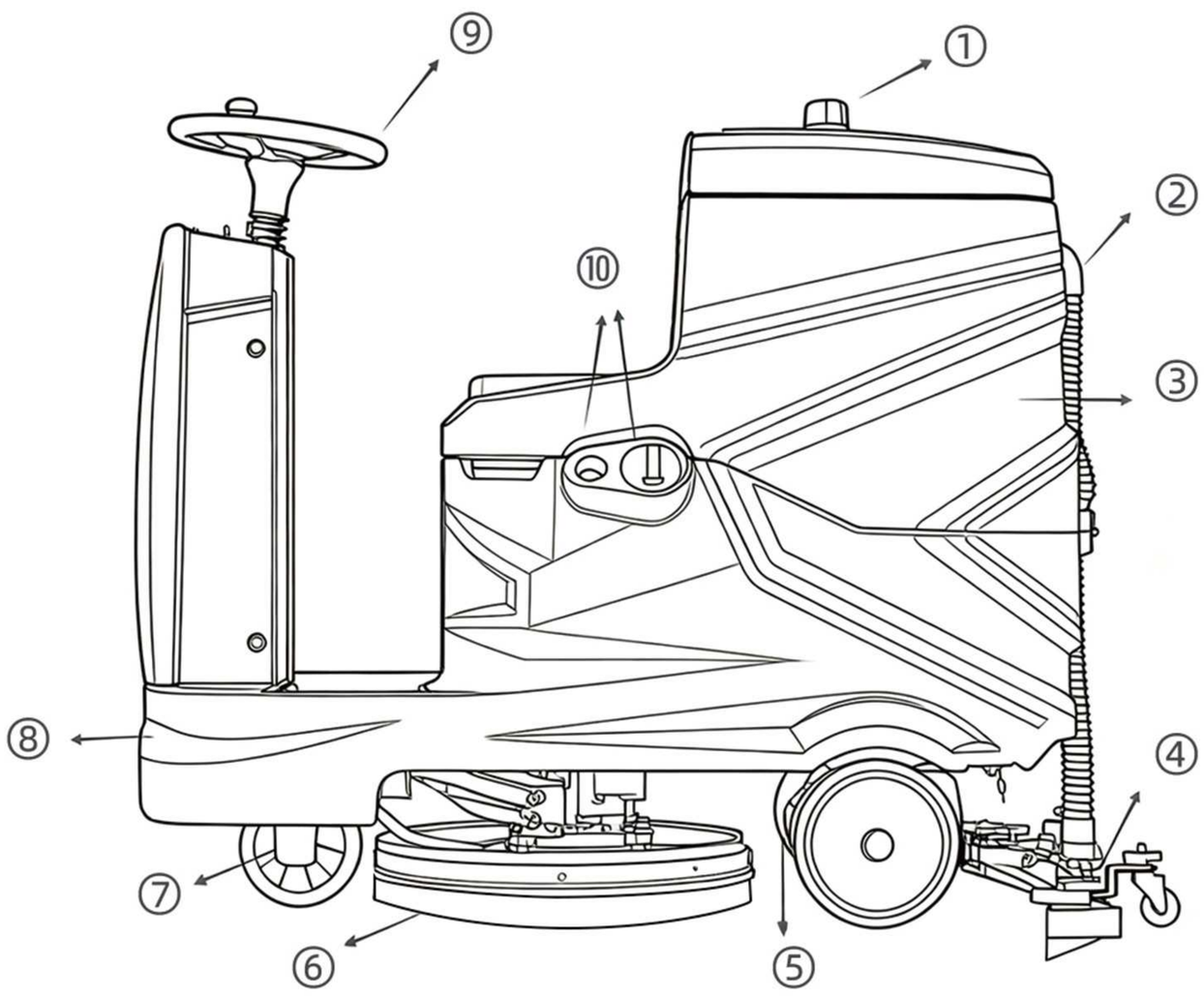
⚠ **注意：** 若发现部件缺失或损坏，请立即联系经销商或史沃斯客户服务。

**Note:** Contact the dealer or Shiwosi customer service immediately if any parts are missing or damaged.

⚠ **注意：** 请保留包装材料，直至完成产品的全面检查和测试。

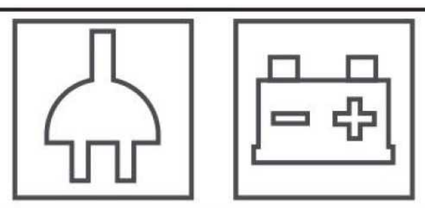
**Note:** Keep the packaging materials until the comprehensive inspection and testing of the product are completed.

## 2.2 产品概览【Product Overview】

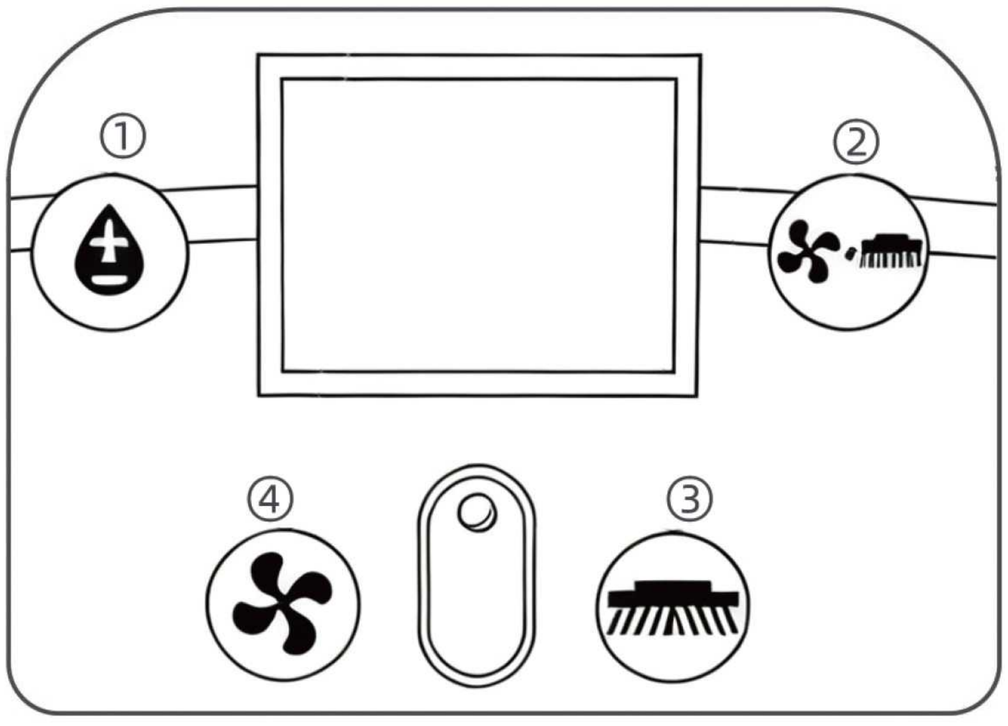



| | |
| --- | --- |
| ① | 警示灯（warning light） |
| ② | 吸污管（Squeegee hose） |
| ③ | 污水箱（Dirty water tank） |
| ④ | 吸水扒（Squeegee） |
| ⑤ | 驱动电机（Driving motor） |
| ⑥ | 刷盘系统（Scrubbing head） |
| ⑦ | 清水过滤器（Clean water filter） |
| ⑧ | 清水箱（Clean water tank） |
| ⑨ | 方向盘（Steering wheel） |
| ⑩ | 注水口（clean water filling port） |

## 2.3 机器符号【Machine Symbols】

| 符号【Symbol】 | 含义【Meaning】 |
| --- | --- |
|  | 电瓶充电插头（Battery Charging Plug） |
|  | 清水箱排放口（Clean Water Tank Drain Port） |
|  | 污水箱排放口（Sewage Tank Drain Port） |

## 2.4 操作台说明【Control Console Description】




| | |
| --- | --- |
| ① | 出水量调节开关（Water Switch） |
| ② | 吸水扒和刷盘一键启动开关（Brush and Squeegee one-touch Start Switch） |
| ③ | 刷盘升降开关（Brush Lift Switch） |
| ④ | 吸水扒吸水开关（Squeegee Switch） |

# 3 产品安装【Product Installation】

## 3.1 开箱操作【Unpacking Operation】

⚠ **警告：** 严禁不使用坡道直接将机器搬离托盘，可能导致机器结构变形或部件损坏。

**Warning:** Do not move the machine off the pallet without using a ramp,which may cause deformation of the machine structure or damage to parts.

1. 仔细检查机器包装箱是否有破损、挤压或水渍。如有损坏，立即向承运人提出索赔并联系经销商。
   Carefully check the machine packaging box for damage,extrusion or water stains. File a claim with the carrier immediately and contact the dealer if damaged.
2. 使用剪刀剪断包装带，依次取下外层纸箱、缓冲泡沫及配件盒（配件需单独核对清单）。
   Use scissors to cut the packing belt, and remove the outer carton,buffer foam and accessory box in turn (check the accessory list separately for accessories).
3. 确保刷盘 / 清洁垫处于最高位置，避免卸机时与木质垫块摩擦导致部件划伤。
   Ensure the brush disc/cleaning pad is at the highest position to avoid scratches on parts caused by friction with wooden blocks during unloading.

4. 用榔头敲除限位轮块（运输固定用），确保机器轮子可自由转动。
   Use a hammer to remove the limit wheel block (for transportation fixation) to ensure the machine wheels can rotate freely.
5. 将木质垫块与机器后轮对齐，形成缓坡过渡（垫块厚度建议不超过 5cm，坡度≤5°）
   Align the wooden block with the rear wheel of the machine to form a gentle slope transition (the thickness of the block is recommended to be no more than 5cm,slope ≤5°).
6. 插入钥匙并接通电源，缓慢推动机器沿木质垫块下滑至地面（建议两人配合：一人控制方向，一人在前方引导平衡）。
   Insert the key and turn on the power,and slowly push the machine down the wooden block to the ground (two people are recommended to cooperate: one person controls the direction,and the other guides the balance in front).
7. 卸机后检查刷盘、吸水扒等部件是否因运输松动，确认无异常后移除所有垫块。
   After unloading,check if the brush disc,squeegee and other parts are loose due to transportation,and remove all blocks after confirming no abnormality.

## 3.2 安装电瓶【Battery Installation】

⚠ **警告：** 火灾或爆炸危险。电瓶释放出氢气。请远离火花或开放火源。充电时须保持电瓶盖开启。
**Warning:** Fire or explosion hazard.Batteries release hydrogen gas.Keep away from sparks or open flames.Keep the battery cover open during.

⚠ **注意：** 安装后检查线缆无松动，合上污水箱并通电测试电压是否正常（约 24V）。
**Note:** After installation, check that the cable is not loose,close the sewage tank and conduct a power-on test to confirm the voltage is normal (about 24V).

**为安全起见：** 维修机器时，在处理电瓶及电瓶接线时穿戴防护手套及护目装备。避免接触电瓶液酸。
**charging.For safety:** When maintaining the machine,wear protective gloves and goggles when handling the battery and battery wiring.Avoid contact with battery acid,

| | | |
|---|---|---|
| 电瓶规格<br>Battery Specs | 电瓶型号<br>Battery Model | 24V100AH |
| | 尺寸限制<br>Size Limit | 最大 332mm×176mm×214mm（长 × 宽 × 高）<br>Max. 332mm×176mm×214mm (Length×Width×Height) |

1. 将机器停放在水平地面上，并取出钥匙。
   Park the machine on a level ground and take out the key.
2. 抬起污水箱使可触到电瓶舱漏出。
   Lift the sewage tank to expose the battery compartment.
3. 小心将电瓶安装在电瓶舱内，并依照右图所示连接电瓶电缆线机器正面。
   Carefully install the battery in the battery compartment and connect the battery cables as shown in the figure on the front of the machine.

4. 接上电瓶之前，请先确定电极和电端是否干净的。视需要使用电极清洗液和钢丝刷。

Before connecting the battery,make sure the electrodes and terminals are clean.Use electrode cleaning fluid and a steel wire brush if necessary.

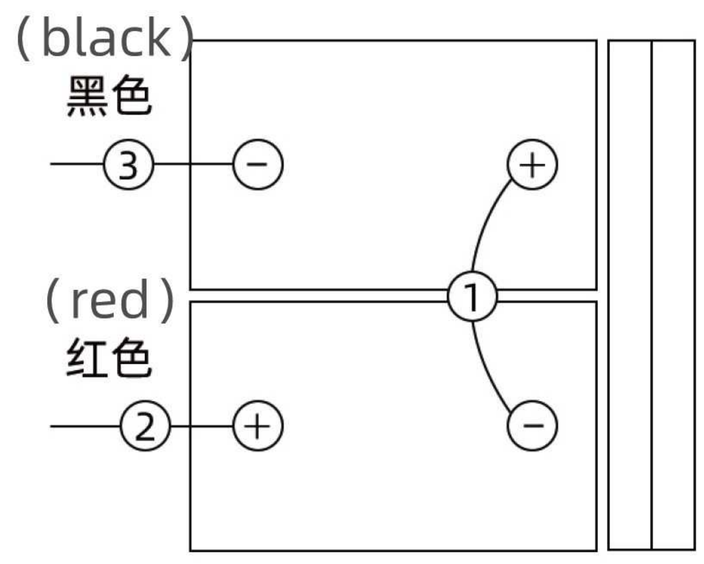


图 1

5. 电瓶装妥后，请检查电瓶电量表的电量刻度。视需要进行电瓶充电。

After the battery is installed, check the power scale on the battery level indicator. Charge the battery if necessary.

**说明：**在连接的接线上涂抹薄薄一层不含金属的润滑油或是保护喷雾剂，以避免电瓶腐蚀。

**Explanation:** Apply a thin layer of metal-free lubricating oil or protective spray on the connected wires to avoid battery corrosion.

⚠ **注意：**请勿将电瓶丢掷到电瓶舱内，以免造成电瓶与机器的损坏。

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

## 3.3 安装机器【Machine Assembly】

### 机器工作原理【Working Principle】

水和清洁剂通过水阀、电磁阀输送至刷盘与地面，刷盘旋转搅拌清洁剂与水形成清洁液，对地面进行擦洗；同时，吸水马达通过吸水扒组件将污水吸入污水箱，实现“洗 - 吸”同步完成。

Water and cleaning agent are delivered to the brush disc and the ground through the water valve and solenoid valve. The rotating brush disc agitates the cleaning agent and water to form a cleaning solution to scrub the ground; at the same time, the water suction motor sucks the sewage into the sewage tank through the squeegee assembly, realizing the simultaneous completion of "cleaning and suction".

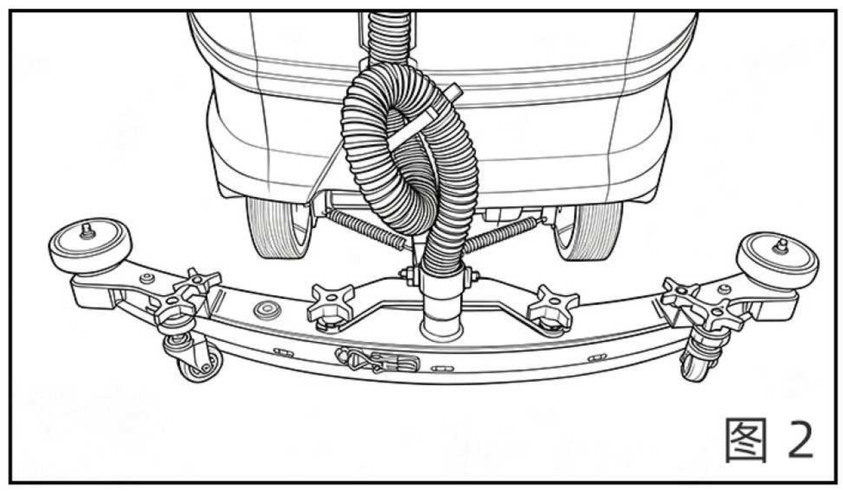
### 3.3.1 连接吸水扒组件【Connecting the Squeegee Assembly】

1. 将机器停放在水平地面并取出钥匙。

Park the machine on a level ground and take out the key.

2. 将吸水扒升降杆降至下方位置。

Lower the squeegee lifting lever to the lower position.


图 2

3. 将吸水扒装至吸水扒安装托架上务必将紧固旋钮完全置入插孔后再旋紧旋钮。

Install the squeegee on the squeegee mounting bracket, and ensure the fastening knob is fully inserted into the jack before tightening the knob.

4. 将真空吸水管接上吸水扒组件。

Connect the vacuum suction pipe to the squeegee assembly.

5. 检查吸水扒胶条并进行适当调整。

Check the rubber strip of the squeegee and make appropriate adjustments.

### 3.3.2 安装刷盘 / 百洁垫【Installing the Brush Disc/Scouring Pad】

1. 将机器停放在水平地面并取出钥匙。

Park the machine on a level ground and take out the key.

2. 启动刷盘开关，保证刷盘离开地面。

Start the brush disc switch to ensure the brush disc is off the ground.

3. 先将百洁垫置于针座上，再安装驱动盘。栓紧中央锁将百洁垫固定。

First place the scouring pad on the needle seat, then install the drive disc.Tighten the central lock to fix the scouring pad.

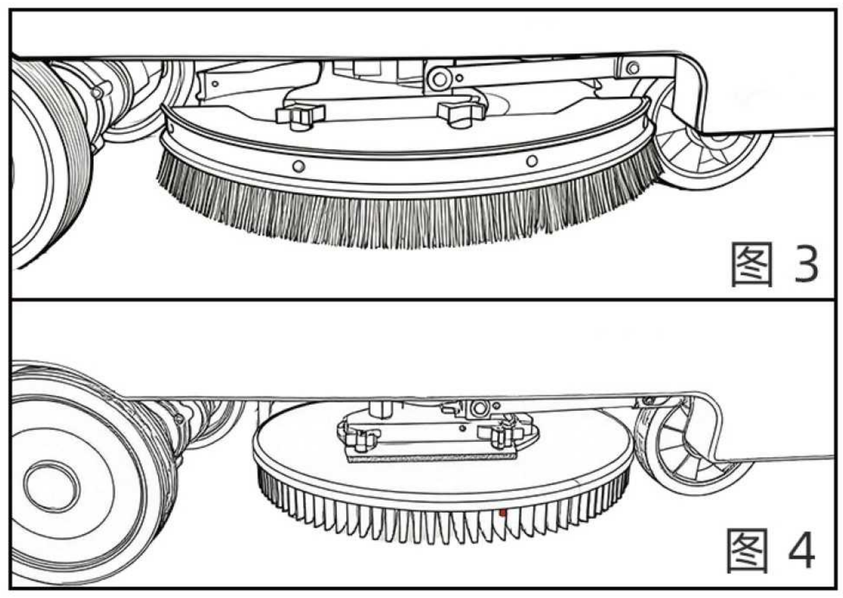

图 3


图 4

4. 将针座 / 刷子安装柱栓对准插入马达驱动盘卡扣，按下刷盘马达开关。

Align the needle seat/brush mounting post with the motor drive disc buckle and press the brush disc motor switch.

5. 如要拆卸针座和刷盘，启动刷盘开关，保证刷盘离开地面，拆卸刷盘。

To remove the needle seat and brush disc, start the brush disc switch to ensure the brush disc is off the ground, then remove the brush disc.

## 4 机器操作【Machine Operation】

为安全起见：尚未阅读并理解操作手册前，请勿操作机器。

For safety: Do not operate the machine before reading and understanding the operation manual.

⚠ **警告：** 火灾或爆炸危险。切勿在靠近或位于有易燃性液体、气体或可燃性灰尘的场所操作机器。

**Warning:** Fire or explosion hazard. Do not operate the machine near or in places with flammable liquids, gases or combustible dust.

### 4.1 操作前检查【Pre-operation Inspection】

- 清扫地面上的灰尘。

  Sweep dust on the ground.

- 检查电瓶电量表的电量刻度。（参照电瓶电量表）

  Check the power scale on the battery level indicator (refer to the battery level indicator).

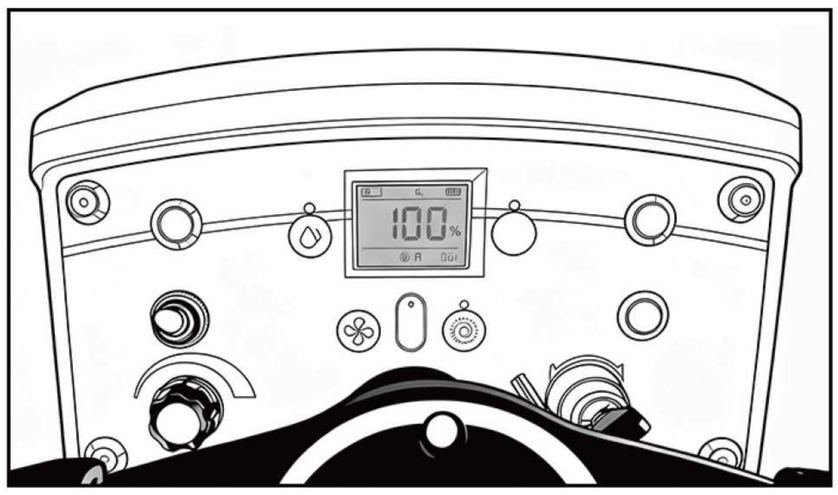
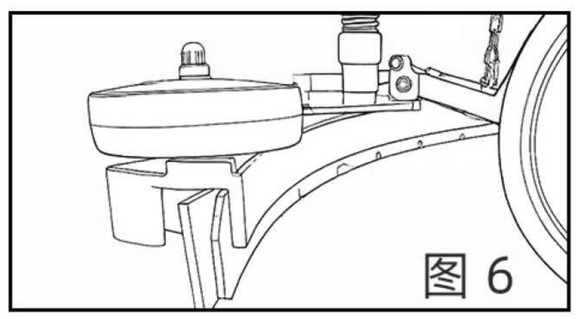


图 5

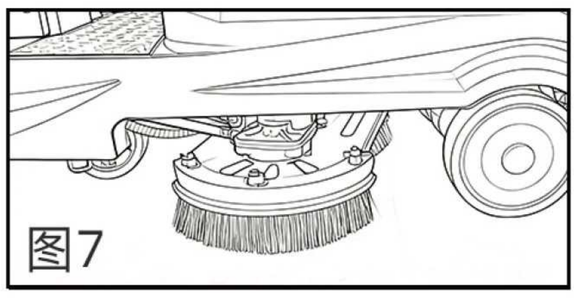
- 检查百洁垫 / 刷子的磨损情况。
  Check the wear condition of the scouring pad/brush.
- 检查吸水扒胶条的磨损情况，并适当调整角度。
  Check the wear condition of the rubber strip of the squeegee and adjust the angle appropriately.
- 确定污水箱是空的，并已安装干净的浮动式过滤网。
  Ensure the sewage tank is empty and a clean floating filter is installed.
- 检查刷头裙部的磨损情况。
  Check the wear condition of the brush head skirt.

## 4.2 操作机器【Operating the Machine】

1. 将主电源钥匙转开至 ON 的位置。
   Turn the main power key to the ON position.
2. 按下吸水扒开关按钮，使吸水扒组件降至地面。
   Press the squeegee switch button to lower the water suction rake assembly to the ground.
3. 按住刷盘开关按钮，使刷头降至地面。
   Press and hold the brush disc switch button to lower the brush head to the ground.


图 6

4. 按下水量开关按钮，调节出水量。
   Press the water volume switch button to adjust the water output.


图7

5. 马达驱动机型：将速度控制旋钮调整到您所要的清洗速度。
   Motor-driven model: Adjust the speed control knob to the desired cleaning speed.

**说明：** 建议使用每分钟 45-60 米的清洗速度。

**Explanation:** It is recommended to use a cleaning speed of 45-60 meters per minute.

## 4.3 操作机器期间【During Machine Operation】

⚠ **警告：** 火灾或爆炸危险。请勿拾取易燃性材料或活性金属。

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

⚠ **注意：** 请勿让泡沫进入过滤网，以避免损坏真空马达。泡沫会让过滤网开关无法失效。

**Note:** Do not allow foam to enter the filter to avoid damaging the vacuum motor. Foam will disable the filter switch.

1. 每道清洗路径重叠 5 厘米。
   Each cleaning path should overlap by 5 cm.

2. 使机器持续行进以免损伤地面。

Keep the machine moving continuously to avoid damaging the ground.

3. 如吸水扒吸水后，地面有拖痕，用抹布擦试胶条去除垃圾。事先清扫以防拖痕产生。

If streaks remain on the floor after the squeegee has suctioned water,wipe the rubber blades with a cloth to remove debris.Pre-sweep the area to prevent streaks in advance.

4. 勿于坡度超过5%(3°)的斜面操作机器。

Do not operate the machine on slopes with a gradient exceeding 5% (3°).

5. 如果泡沫过多，将建议使用的消泡剂溶液倒入污水箱。

If excessive foam is generated,pour the recommended defoamer solution into the recovery tank.

6. .使用双重清洗方式清洁极度脏污的区域。先将吸水扒升起进行清洗，让溶液浸渍3-5分钟后，将吸水扒降下并再次清洗。

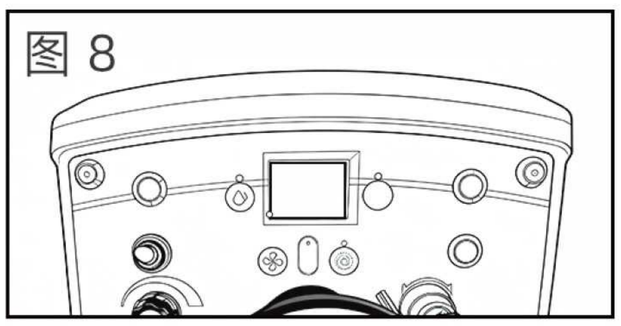
Use a two-step cleaning method for heavily soiled areas: first,lift the squeegee to clean,allow the solution to dwell for 3-5 minutes,then lower the squeegee and clean again.

7. 视需要更换或旋转百洁垫。

Replace or rotate the pad as needed.

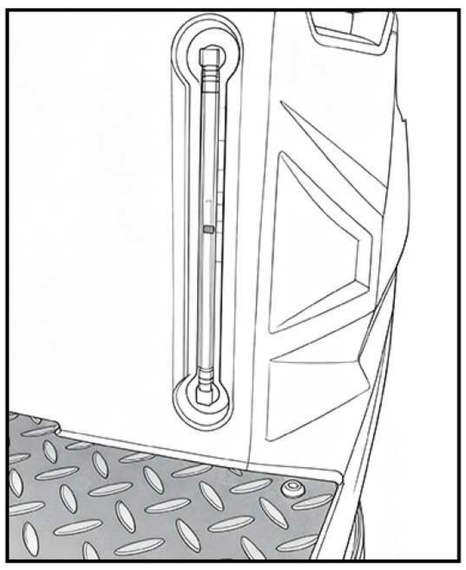
8. 观察电瓶电力表的用电量(参照「电瓶电力表」)。

Monitor the battery level via the battery gauge (refer to "Battery Gauge" section).


图 8

9. 透过清水箱液位计察看剩余液量。传统洗地方式每10分钟的用量约10公升;

Check the remaining solution level through the fresh water tank level gauge.The approximate consumption for conventional scrubbing is 10 liters every 10 minutes.


图 9

10.清水箱内的溶液用完时，先清空污水箱再重新注入溶液。

When the solution in the fresh water tank is exhausted,empty the recovery tank completely before refilling with solution.

11.工作人员离开机器时，请将机器停放在水平地面并取出钥匙。

When leaving the machine unattended,park it on a level surface and remove the key.

12.清洗完毕后，进行每日维护程序(参照「机器维护」)。

After cleaning is complete,perform the daily maintenance procedures (refer to "Machine Maintenance" section).

为安全起见:使用机器时，在斜坡和滑面地面上，请缓慢移动。

Safety Notice: When operating the machine,move slowly on slopes and slippery surfaces.

## 4.4 电瓶电瓶电量表【Battery Level Indicator】

电瓶电量表会显示电瓶的电量。当电瓶充满电时，所有的指示灯均亮起。随着电量耗用，指示灯会从右至左依次熄灭。为延长电瓶寿命，请勿让指示灯熄灭至低于下述的用电量。

The battery level indicator will show the battery power.When the battery is fully charged, all indicator lights are on.As the power is consumed,the indicator lights will go out from right to left in turn.To extend the battery life,do not let the indicator lights go out below the following power consumption.

**说明：**为延长电瓶的寿命，请务必于机器总使用时数超过 30 分钟后再进行电瓶充电。

**Explanation:** To extend the battery life, be sure to charge the battery after the total operating time of the machine exceeds 30 minutes.

## 4.5 水箱排水【Water Tank Drainage】

每次使用后应将污水箱排干并清洗。清水箱应定期清理以去除任何腐蚀部位。将机器搬运至排水地点，关闭电源钥匙，依照下列排放指示进行排水：

The sewage tank should be drained and cleaned after each use.The clean water tank should be cleaned regularly to remove any corroded parts.Move the machine to the drainage location,turn off the power key,and drain according to the following discharge instructions:

1. 依逆时钟方向旋开污水箱排水管盖，将其取下。

   Unscrew the sewage tank drain pipe cover counterclockwise and remove it.

2. 打开污水箱盖，然后冲洗水箱。

   Open the sewage tank cover and rinse the water tank.

3. 拆卸并冲洗位在污水箱内的浮动过滤网。

   Remove and rinse the floating filter located in the sewage tank.

为安全起见：离开或维修机器之前，请将机器停放在水平地面上并关闭机器和取出钥匙。

For safety： Before leaving or repairing the machine, park the machine on a level ground, turn off the machine and take out the key.

## 4.6 电瓶充电【Battery Charging】

⚠ **注意：**为了延长电瓶的寿命并确保机器的最佳效能，必须在机器使用时间最少超过 30 分钟以上才能进行电瓶充电。请勿让电瓶长期处于未充电状态。以下的充电说明适用于本机器随附的充电器。请务必使用下列规格的充电器，以免电瓶损坏。

**Note:** To extend the battery life and ensure the optimal performance of the machine, the battery must be charged after the machine has been used for at least 30 minutes. Do not leave the battery uncharged for a long time. The following charging instructions apply to the charger included with this machine. Be sure to use a charger with the following specifications to avoid battery damage.

## 电瓶充电器规格【Battery Charger Specifications】

- 充电器类型:-铅酸电瓶/锂电池用充电器
  Charger Type:Charger for lead-acid batteries/lithium batteries
- 输出电压-24伏特
  Output Voltage-24 Volts
- 自动断电电路
  Automatic power-off circuit
- 适用于深度循环式电瓶充电
  Suitable for deep-cycle battery charging

## 充电步骤【Charging Steps】

⚠ **警告:** 火灾或爆炸危险。电瓶释放出氢气。请远离火花或开放式火源。充电时须保持电瓶舱开启。
**Warning:** Fire or explosion hazard.Batteries release hydrogen gas.Keep away from sparks or open flames.Keep the battery compartment open during charging.

1. 将机器移至通风良好的场所进行充电。
   Move the machine to a well-ventilated place for charging.
2. 将机器停放在水平地面上，并将钥匙转到关闭位置。
   Park the machine on a level ground and turn the key to the OFF position.
3. 充电前，检查各电瓶单元中的电解液液位。
   Before charging, check the electrolyte level in each battery cell.
4. 充电时，请将污水箱侧开以利通风。
   During charging, keep the sewage tank open for ventilation.
5. 将充电器的 AC（交流）电源线插入接地良好的电源插座上。
   Insert the AC (alternating current) power cord of the charger into a well-earthed power socket.
6. 将充电器的 DC（直流）线插入污水箱后方的电瓶充电插座上。
   Insert the DC (direct current) cord of the charger into the battery charging socket at the rear of the sewage tank.
7. 充电器将自动开始充电，并且会在充满时自动关闭。
   The charger will start charging automatically and turn off automatically when fully charged.
8. 充电完毕后，再次检查电解液面高度。
   After charging is completed, check the electrolyte level again.

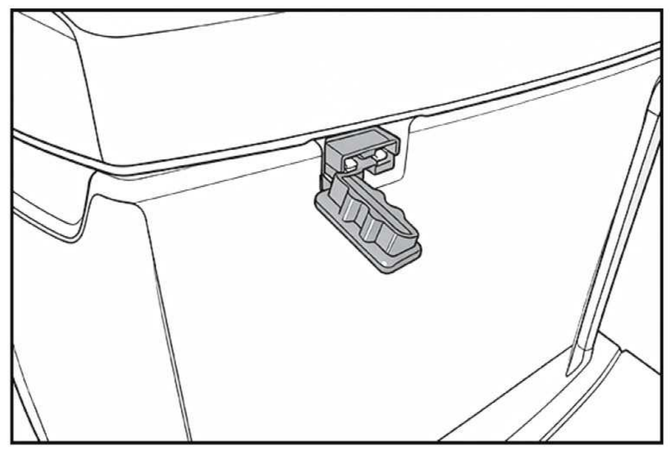


图10

为安全起见：维修机器时，请在处理电瓶及电瓶接线时穿戴防护手套及护目装备。避免接触电瓶液酸。
For safety: When maintaining the machine, wear protective gloves and goggles when handling the battery and battery wiring. Avoid contact with battery acid.

# 5 维护与保养【Maintenance & Upkeep】

## 机器维护(Machine Maintenance）

只要确实遵守每日、每周及每月的维护程序，机器即可保持在最佳工作状态。

The machine can maintain optimal working condition as long as the daily,weekly and monthly maintenance procedures are strictly followed.

⚠ **警告：** 触电危险。维护机器前请先断开电瓶接线。

**Warning:** Electric shock hazard. Disconnect the battery wiring before maintaining the machine.

### 每日维护【Daily Maintenance】

1. 排干并清洗污水箱。

   Drain and clean the sewage tank.

2. 拆取并冲洗位于污水箱内的浮动式过滤网。

   Remove and rinse the floating filter located in the sewage tank.

3. 排干清水箱，并视需要用不高于 60°C 的热水冲水箱。

   Drain the clean water tank and rinse the tank with hot water not exceeding 60°C if necessary.

4. 卸取百洁垫 / 刷盘进行清理。如有磨损，翻转或更换百洁垫。

   Remove the scouring pad/brush disc for cleaning.If worn,flip or replace the scouring pad.

5. 擦拭吸水扒胶条。将吸水扒组件放置于升起位置，以防胶条损坏。

   Wipe the rubber strip of the squeegee.Place the water suction rake assembly in the raised position to prevent damage to the rubber strip.

6. 检查吸水扒胶条刮刀边缘的磨损状况。如有耗损，将胶条两头对调。

   Check the wear condition of the scraper edge of the rubber strip of the water suction rake.If worn,reverse the two ends of the rubber strip.

7. 使用多用途清洁剂和湿布擦拭机器。

   Wipe the machine with a multi-purpose cleaning agent and a damp cloth.

8. 检查刷头裙边的磨损状况，如有耗损或损坏即予更换。

   Check the wear condition of the brush head skirt.Replace it if worn or damaged.

9. 给电瓶充电。为了延长电瓶的使用寿命并确保机器的最佳效能，必须在机器使用时间超过 30 分钟以上才能进行电瓶充电。

   Charge the battery. To extend the service life of the battery and ensure the optimal performance of the machine, the battery must be charged after the machine has been used for more than 30 minutes.

为安全起见：清理机器时，请勿以高压喷洒或水管冲洗机器。以免造成电子零件故障。
For safety:  Do not clean the machine with high-pressure spray or water pipe to avoid electronic component failure.

**每月维护 (每使用 80 小时)【Monthly Maintenance (Every 80 Operating Hours)】**

1. 从机器下面拆卸清水箱过滤器并清洗滤网。确保在拆卸过滤器之前倒空清水箱。
   Remove the clean water tank filter from under the machine and clean the filter screen. Ensure the clean water tank is emptied before removing the filter.
2. 清洁电瓶顶端以防电极腐蚀（参照「电瓶维护」）。
   Clean the top of the battery to prevent electrode corrosion (refer to "Battery Maintenance").
3. 检查电瓶接线是否松脱。
   Check if the battery wiring is loose.
4. 检查并清洁污水箱盖封条。如有损坏即予更换。
   Check and clean the sewage tank cover seal.Replace it if damaged.
5. 在所有的枢轴及滚轮上喷洒矽胶干式润滑剂，再覆盖一层防水性润滑油，以保持轮轴的顺畅运作。
   Spray silicone dry lubricant on all pivots and rollers,then cover with a layer of waterproof lubricating oil to maintain smooth operation of the axles.
6. 检查机器上的螺帽及螺栓是否松脱。
   Check if the nuts and bolts on the machine are loose.
7. 检查机器是否渗漏。
   Check if the machine is leaking.

**每季维护【Quarterly Maintenance】**

每 250 小时检查驱动马达（驱动机型）、真空马达及刷子马达的碳刷磨损情况。当炭刷长度磨损 10 毫米以内时，需要换碳刷。机器如需送修，请与授权的服务中心联络。
Check the carbon brush wear of the drive motor (motor-driven model),vacuum motor and brush motor every 250 hours.When the carbon brush length is worn within 10 millimeters,the carbon brush needs to be replaced.If the machine needs to be repaired,contact an authorized service center.

⚠ **警告：** 触电危险。维修机器前请先断开电瓶接线。
**Warning:** Electric shock hazard. Disconnect the battery wiring before repairing the machine.

# 6 搬运与存放【Handling & Storage】

## 6.1 搬运机器【Handling the Machine】

使用卡车或拖车搬运机器时，请务必遵循下列捆绑程序：

When transporting the machine by truck or trailer, be sure to follow the following strapping procedures:

1. 将刷头升起至搬运位置。

   Raise the brush head to the transport position.

2. 使用建议的装卸坪装载机器。

   Use the recommended loading platform to load the machine.

3. 将机器正面紧靠在卡车或拖车的前方部位。机器放妥后，降下刷头并将钥匙转到关闭位置。

   Lean the front of the machine against the front part of the truck or trailer.After the machine is in place,lower the brush head and turn the key to the OFF position.

4. 在每个驱动轮的后方放置障碍物，以防机器滑动。

   Place obstacles behind each drive wheel to prevent the machine from sliding.

5. 使用绳索固定机器的顶端以防止倾斜。您必须要在卡车或拖车的车板上装设托架。

   Use ropes to fix the top of the machine to prevent tilting.You must install brackets on the truck or trailer bed.

为安全起见：搬运机器时，请使用建议的装卸坪从卡车或拖车上装卸机器，并以绳索将 机器固定在车板上。

For safety: When handling the machine, use the recommended loading platform to loadand unload the machine from the truck or trailer,and fix the machine on the bed with ropes.

## 6.2 贮存机器【Storing the Machine】

**注意：**切勿让机器受到雨淋，将其贮存在室内。

**Note:** Do not let the machine be exposed to rain; store it indoors.

1. 存放前请先将电瓶充电。切勿在电量耗尽的情况下进行贮存。

   Charge the battery before storage. Do not store it when the battery is exhausted.

2. 将水槽内的水槽箱彻底排干并冲洗干净。

   Thoroughly drain and rinse the water tanks.

3. 将机器存放在干燥的场所，且刷头应保持在升起位置。

   Store the machine in a dry place with the brush head kept in the raised position.

4. 打开污水箱盖以利通风。

   Open the sewage tank cover for ventilation.

5. 如于寒冷环境下存放机器，请确实排干机器内部所有的液体。

   If storing the machine in a cold environment,be sure to drain all liquids inside the machine.

# 7 故障排除【Troubleshooting】

| 问题<br>【Problem】 | 原因<br>【Cause】 | 解决方案<br>【Solution】 |
|---|---|---|
| 机器无法操作<br>The machine fails to operate | 电瓶没电<br>Battery is dead | 电瓶充电<br>Charge the battery |
| | 电瓶故障<br>Battery malfunction | 更换电瓶<br>Replace the battery |
| | 电瓶接线松脱<br>Loose battery wiring | 拧紧电瓶接线<br>Tighten the battery wiring |
| | 主保险丝烧断<br>Main fuse blown | 更换保险丝<br>Replace the fuse |
| 刷盘马达不工作<br>Brush disc motor does not work | 刷头升离地面<br>Brush head is off the ground | 降下刷头<br>Lower the brush head |
| | 电瓶电量表锁住未启动<br>Battery level indicator is locked and not activated | 电瓶充电<br>Charge the battery |
| | 刷盘马达电路断路器触发跳电<br>Brush disc motor circuit breaker trips | 重设刷子电路断路器按钮<br>Reset the brush circuit breaker button |
| | 刷子 (上 / 下) 开关故障<br>Brush (up/down) switch malfunction | 请与服务中心联络<br>Contact the service center |
| | 马达碳刷磨损<br>Motor carbon brush wear | 请与服务中心联络<br>Contact the service center |
| 真空马达不工作<br>Vacuum motor does not work | 吸水扒升离地面<br>squeegee is off the ground | 降下吸水扒<br>Lower the squeegee |
| | 真空马达保险丝烧断<br>Vacuum motor fuse blown | 更换保险丝<br>Replace the fuse |
| | 真空马达或配线故障<br>Vacuum motor or wiring malfunction | 请与服务中心联络<br>Contact the service center |

| 问题<br>【Problem】 | 原因<br>【Cause】 | 解决方案<br>【Solution】 |
| --- | --- | --- |
| 真空马达不工作<br>Vacuum motor does not work | 马达碳刷磨损<br>Motor carbon brush wear | 请与服务中心联络<br>Contact the service center |
| 少量或无水流出<br>Little or no water flow | 清水箱或溶液管堵塞<br>Clean water tank or solution pipe is blocked | 清洗清水箱过滤器<br>Clean the clean water tank filter |
| | 水流控制旋钮流速设定太低<br>Water flow control knob is set too low | 调整水流控制旋钮<br>Adjust the water flow control knob |
| | 松开控制旋钮的螺丝<br>Loose screw of the control knob | 润滑旋钮后锁紧螺丝<br>Lubricate the knob and tighten the screw |
| 回收污水效率低<br>Low sewage recovery efficiency | 污水箱已满<br>Sewage tank is full | 排干污水箱<br>Drain the sewage tank |
| | 吸水胶条磨损<br>Worn water suction rubber strip | 更换吸水胶条<br>Replace the water suction rubber strip |
| | 吸水管堵塞<br>Clogged suction pipe | 清除堵塞<br>Remove the clogged debris |
| | 污水箱密封条损坏<br>Damaged sewage tank seal | 更换密封条<br>Replace the seal |
| | 真空马达故障<br>Vacuum motor malfunction | 请与服务中心联络<br>Contact the service center |
| 运转时间缩短<br>Reduced operating time | 电瓶有瑕疵<br>Defective battery | 更换电瓶<br>Replace the battery |
| | 电瓶充电故障<br>Battery charging malfunction | 维修或更换充电器<br>Repair or replace the charger |

# 8 规格参数【Specifications】

| 项目【Item】 | 规格参数【Specification 】 |
| --- | --- |
| 产品型号（Product Model） | V8 驾驶式洗地机<br>V8 Ride-on Floor Scrubber |
| 清洁效率（Cleaning Efficiency） | 4000 ㎡/h |
| 清洁宽度（Cleaning Width） | 580 MM |
| 吸扒宽度（Squeegee Width） | 1050 MM |
| 清水箱容量（Clean Water Tank Capacity） | 90 L |
| 污水箱容量（Sewage Tank Capacity） | 95 L |
| 刷盘电机（Brush Disc Motor） | 600 W |
| 吸水电机（Vacuum Motor） | 600 W |
| 工作时间（Working Time） | 3-4 H |
| 电瓶配置（Battery Configuration） | 24V 100Ah |
| 整机重量（Machine Weight） | 228 KG |
| 机器尺寸（Machine Dimensions） | 1380×1050×1140 MM |

# 保修卡【Warranty Card】

## 保修政策【Warranty Policy】

- 产品自购买之日起保修一年。请参考当地法律法规，了解适用于您所在地区的具体保修期限。
  The product warranty period is one year from the date of purchase.Please refer to local laws and regulations for the specific warranty period applicable in your region.
- 本保修仅适用于从授权的史沃斯零售商处进行的原始购买。
  This warranty applies only to original purchases from authorized Shiwosi retailers.
- 保修期可能因国家 / 地区而异，并受当地法律法规的约束。
  The warranty period may vary by country/region and is subject to local laws and regulations.

## 保修免责条款【Warranty Exclusions】

在保修期内，以下情况不在保修范围内：

During the warranty period,the following situations are not covered by the warranty:

1. 消费者因使用（未遵守产品说明书中“安全规范”“警告”使用）、维护、保管不当等人为原因（包括操作失误、划伤、搬运、磕碰、输入不合适的电压等）导致的产品故障或损坏；
   Product malfunctions or damage caused by human factors such as improper use (failure to comply with "Safety Regulations" and "Warnings" in the product manual), maintenance,or storage (including operational errors,scratches,handling,collisions, input of inappropriate voltage,etc.).
2. 无有效凭证、原始收据或有效发票的；
   No valid warranty certificate,original receipt,or valid invoice is provided.
3. 正常使用引起的产品老化、磨损等（随着使用而正常磨损的部件和物品，比如尘隔、滤芯、电线以及软管钢管等附件）；
   Product aging and wear caused by normal use (parts and items that wear normally with use,such as dust covers,filters,wires,hoses,and other accessories).
4. 由未经授权的维修中心进行维修或个人未经史沃斯许可擅自篡改产品而导致的故障；
   Malfunctions caused by repairs performed by unauthorized service centers or unauthorized product modifications by individuals without Shiwosi's permission.
5. 实际装机容量以实物为准。
   The actual battery capacity installed shall prevail.

注：史沃斯保留修订这些条款的权利，并保留对保修解释的最终决定权，但需遵守适用法律。

Note: Shiwosi reserves the right to revise these terms and reserves the final right to interpret the warranty,subject to applicable laws.

合格证
【Certificate of Conformity】

检验员（Inspector）：_____

如需了解更多保修信息，请访问史沃斯官方网站：shiwosi.com
（For more warranty information,please visit the official website of shiwosi.com）

Powered by Shiwosi

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