

Maintenance Guide

Scrubber 50

Technical support & operation center

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Roller brush cleaning

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appearance cleaning

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Roller brush replacement

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[Switch machine to manual mode]

Press auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off.

1



[Push robot to the maintenance point]

2



[Wipe appearance]

Using a damp, lint-free cloth, wipe the appearance of the machine (be careful not to rub the camera and sensor).

3

Maintenance - Appearance cleaning

Scrubber 50



[Wipe external sensor]

Using a clean, soft, lint-free cloth, gently wipe the laser, camera, and sensor.

4



[Wipe front horizontal laser]

Pull up the front bumper shell buckle, open the front bumper shell, and wipe the front horizontal laser inside.

5



[Wipe top view camera and touch screen]

Using a clean, soft, lint-free cloth, gently wipe the top-view camera. Finally, press screen-off button and wipe the touch screen.

6

Maintenance - water tank cleaning

Empty water tank

Scrubber 50



[Switch machine to manual mode]

Press auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off.

1



[Push robot to the maintenance point]

2



[Open the top lid]

3

Maintenance - water tank cleaning

Empty water tank

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[Open the tank cover]

Remove the entire tank cover.

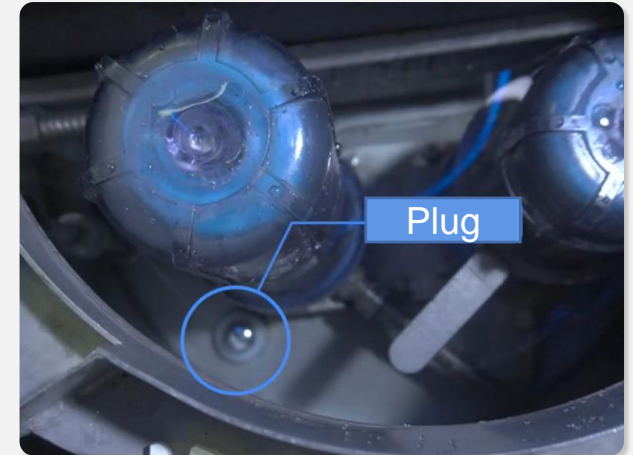
4



[Take wastewater pipe out and drain]

Open the cap of wastewater pipe and quickly put it downward to drain (Warm reminder: hold the pipe upward when opening the cap)

5



[Empty clean water tank]

Unplug the plug in clean water tank after wastewater tank was emptied. The water in clean water tank will flow into wastewater tank. Then, continue to empty wastewater tank using wastewater pipe.

6

Maintenance - water tank cleaning

Remove filters

Scrubber 50



[Remove and clean filter bag]

1. Remove the rope from the hook and lift the filter bag up.
2. Squeeze water out from filter bag
3. Hold filter bag by one hand and take it out by the other hand. Then, put it on the ground and clean it

1



[Remove and clean steel wire filter in wastewater tank]

1. Rotate and loose the steel wire filter anti-clockwise.
2. Take it out by two hands and put it on the ground.
3. Clean it with clean water

2



[Remove and clean filter bottle and cartridge]

1. Use the wrench to loose the filter bottle anti-clockwise.
2. Take filter bottle and cartridge out, put them on the ground and clean them with clean water.
3. Remove and clean the other filter bottle and cartridge in the same way.

3



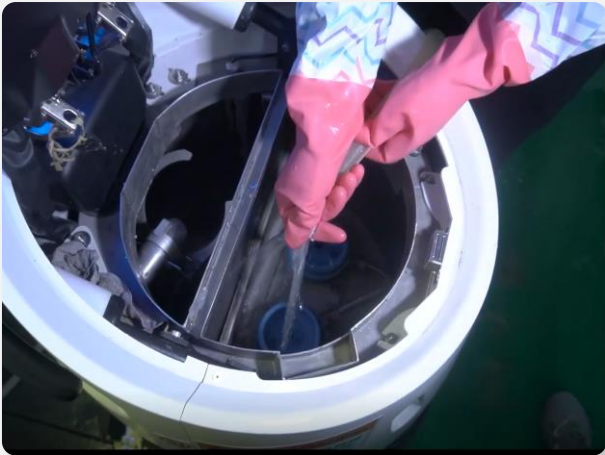
[Remove and clean steel wire filter in clean water tank]

1. Rotate and loose the steel wire filter anti-clockwise.
2. Take it out by two hands and put it on the gourd.
3. Clean it with clean water

Maintenance - Water tank cleaning

Flush water tank

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[Flush inner wall of clean water tank]

Place water pipe into clean water tank before flushing. Then open water valve to flush it. This avoid water splashing to damage other components.

1



[Clean float switch sensor in clean water tank]

Move the float sensor up and down when flushing it.

2



[Flush inner wall of wastewater tank]

Place water pipe into wastewater tank before flushing. Then open water valve to flush it. This avoid water splashing to damage other components.

3

Maintenance - Water tank cleaning

Flush water tank

Scrubber 50



[Flush float switch sensor in wastewater tank]

Move the float sensor up and down when flushing it.

4



[Take pipe out]

Close water valve, drain water from pipe and take pipe out.

5



[Plug in the plug in clean water tank]

6

Maintenance - Water tank cleaning

Clean Filters

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[Clean filter bag]

Trash the garbage in filter bag and flush the inside and out side of it.

1



[Clean steel wire filter]

Flush the 2 steel wire filters. The 2 steel wire filters are the same, no worry to mix them up.

2



[Flush filter bottle and cartridge]

3

Maintenance - Water tank cleaning

Install Filters

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[Install steel wire filter]

Align it to the hole and tighten it clockwise. One for clean water tank, one for wastewater tank.

1



[Install filter bottle and cartridge]

Place cartridge first, then install filter bottle, tighten it clockwise. Install the other set of filter bottle and cartridge in the same way.

Notice: 50-micron filter should be installed on the left side of the machine and the 30-micron filter should be installed on the right side. Tight bottles with the wrench at last.

2



[Install filter bag]

Hook the rope on filter bag hook. the filter bag rope can be rotated and knotted and fixed on the filter bag hook.

3

Maintenance - Water tank cleaning

Recovery

Scrubber 50



[Put the water tank cover back]

4



[Close top lid]

5



[Withdraw drain pipe]

Ensure the cap of pipe is tightly closed, and withdraw the pipe.

6

Maintenance - (roller) brush cleaning

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[Remove front bumper shell]

Pull up the buckle to remove the front bumper shell.

1



[Remove (roller) brush]

Take front roller brush out from left side of robot. Long press the button on the latch and take the latch out. Then remove the metal cover and take the roller brush out.

Take rear roller brush out from right side of robot in the same way to front roller brush.

2



[Clean (roller) brushes]

Take the front and rear roller brushes out, place and clean them on the ground. Use steel bristle brush shipped with robot to clean roller brushes. Clean cloth wiper with detergent. .

3

Maintenance - Squeegee cleaning

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[Wipe surface of inner and outer rubber strip]

Use wet wipe to clean the surface of inner and outer rubber strip.

1



[Wipe the gap between inner and outer strips]

Use wet wipe to clean the gap between inner and outer strips.

2



[Clean the appearance of squeegee]

3

Maintenance - Clean workstation appearance

Scrubber 50



[Unplgu power cable]

1



[Wipe appearance of workstation]
Use wet wipe to clean appearance of workstation.
Do not touch the charging port.

2



[Take the sink and filter foam off]

3

Maintenance - Clean workstation appearance

Scrubber 50



[Flush the filter foam]

4

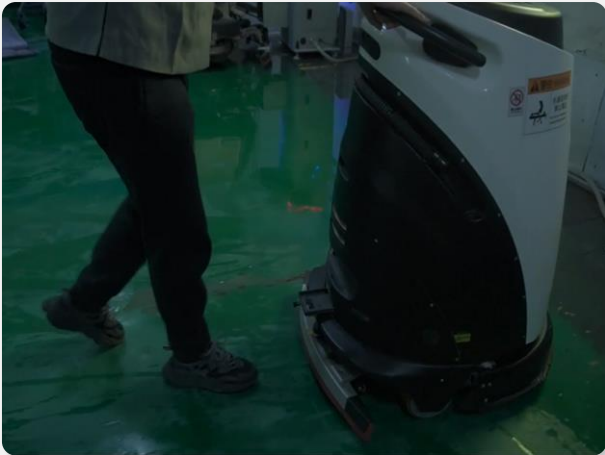


[Install the sink and filter foam]

5

Maintenance - Filter bag replacement

Scrubber 50



[Push robot to maintenance point in manual mode]

Press auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off.

1



[Take out the pipe and drain]

Open the cap of wastewater pipe and quickly put it downward to drain (Warm reminder: hold the pipe upward when opening the cap)
Close the cap tightly after drain completed.

2



[Remove filter bag]

1. Open the top lid and remove the water tank cover.
2. Remove the rope from the hook and lift the filter bag up.
3. Squeeze water out from filter bag
4. Hold filter bag by one hand and take it out by the other hand. Then, put it on the ground and clean it

3

Maintenance - Filter bag replacement

Scrubber 50



[Replace filter bag]

Prepare a new filter bag, wrap the rope around the hook. (The filter bag rope can be rotated and knotted to fix it on the filter bag hook). Then close the water tank cover

4



[Close top lid]

5



[Withdraw drain pipe]

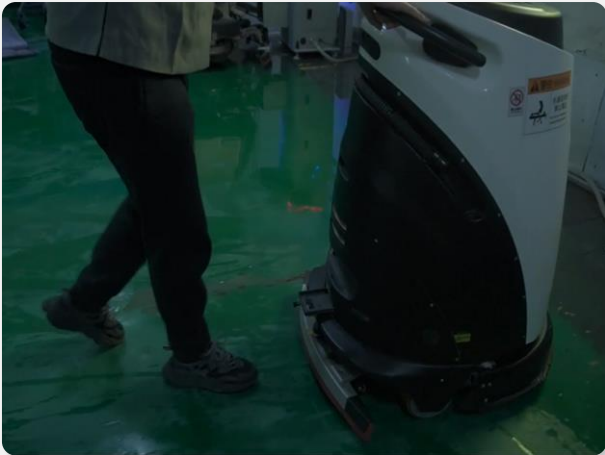
Withdraw drain pipe after ensure the cap is lightly closed.

6

Maintenance - Steel wire filter replacement

Scrubber 50

Clean water tank



[Push robot to maintenance point in manual mode]

Press auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off.

1



[Take out the pipe and drain]

Open the cap of wastewater pipe and quickly put it downward to drain (Warm reminder: hold the pipe upward when opening the cap)
Close the cap tightly after drain completed.

2



[Empty clean water tank]

Unplug the plug in the clean water tank after wastewater tank was emptied. The water in clean water tank will flow into wastewater tank. Then, continue to empty wastewater tank using wastewater pipe.

3

Maintenance - Steel wire filter replacement

Scrubber 50

Clean water tank



[Remove the right filter bottle and cartridge]

Use wrench to loosen filter bottle, remove the bottle and cartridge and place them on the ground. (Prompt: no need to remove the left filter bottle and cartridge)

4



[Remove steel wire filter in clean water tank]

Rotate the steel wire filter in clean water tank anti-clockwise. Hold and drain it with 2 hands and put it aside.

5



[Install new steel wire filter]

Prepare a new steel wire filter, align it to the hole and tighten it clockwise.

6

Maintenance - Steel wire filter replacement

Scrubber 50

Clean water tank



[Install filter bottle and cartridge]

Place cartridge first, then install the bottle and rotate it clockwise. Use the wrench to tighten it at last.

Put the wrench on the bottle, and close the water tank cover.

7



[Close top lid]

8



[Withdraw drain pipe]

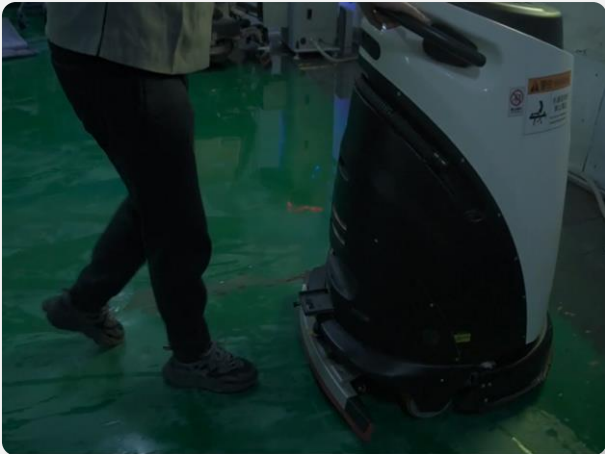
Withdraw drain pipe after ensure the cap is lightly closed.

9

Maintenance - Steel wire filter replacement

Scrubber 50

wastewater tank



[Push robot to maintenance point in manual mode]

Press auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off.

1



[Take out the pipe and drain]

Open the cap of wastewater pipe and quickly put it downward to drain (Warm reminder: hold the pipe upward when opening the cap)
Close the cap tightly after drain completed.

2



[Remove filter bag]

1. Open the top lid and remove the water tank cover.
Remove the
2. Remove the rope from the hook and lift the filter bag up.
3. Squeeze water out from filter bag
4. Hold filter bag by one hand and take it out by the other hand. Then, put it on the ground and clean it

3

Maintenance - Steel wire filter replacement

Scrubber 50

wastewater tank



[Remove steel wire filter in wastewater tank]

Rotate the steel wire filter in wastewater tank anti-clockwise. Hold and drain it with 2 hands, and put it aside.

4



[Install new steel wire filter]

Prepare a new steel wire filter, align it to the hole and tighten it clockwise.

5



[Install filter bag]

Hook the rope on filter bag hook. the filter bag rope can be rotated and knotted and fixed on the filter bag hook.

3

Maintenance - Steel wire filter replacement

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wastewater tank



[Close water tank cover]

7



[Close top lid]

8



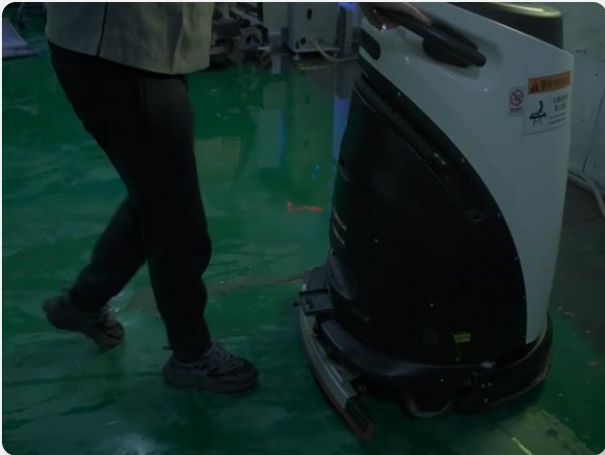
[Withdraw drain pipe]

Withdraw drain pipe after ensure the cap is lightly closed.

9

Maintenance - Filter cartridge replacement

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[Push robot to maintenance point in manual mode]

Press auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off.

1



[Take out the pipe and drain]

Open the cap of wastewater pipe and quickly put it downward to drain (Warm reminder: hold the pipe upward when opening the cap)
Close the cap tightly after drain completed.

2



[Empty clean water tank]

Unplug the plug in clean water tank after wastewater tank was emptied. The water in clean water tank will flow into wastewater tank. Then, continue to empty wastewater tank using wastewater pipe.

3

Maintenance - Filter cartridge replacement

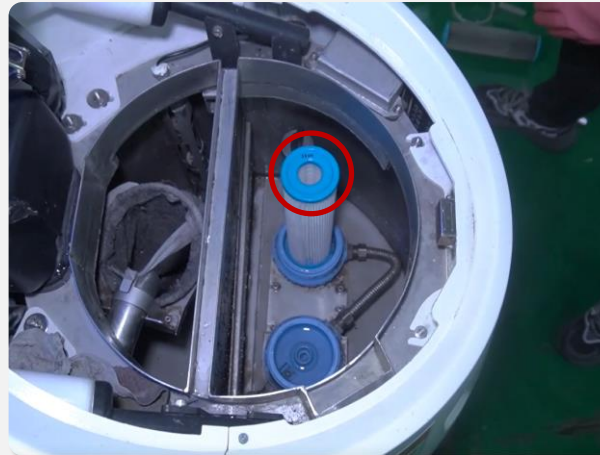
Scrubber 50



[Remove filter bottle and cartridge]

Use wrench to loosen filter bottle anti-clockwise and take bottle and cartridge out. Put cartridge in bottle and place them aside. Take the other set of bottle and cartridge in the same way.

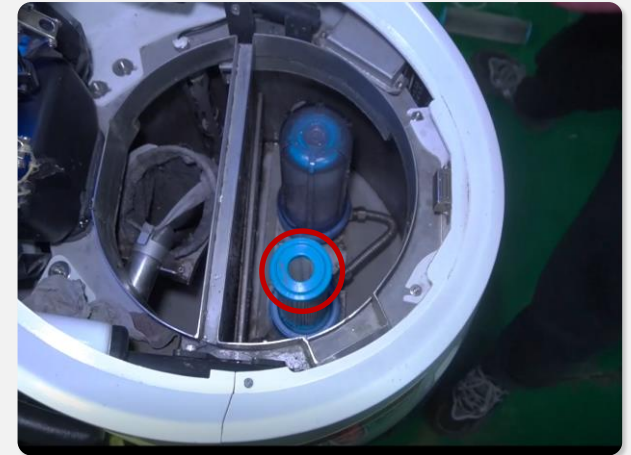
4



[Replace and install 30-micron filter]

Prepare a new cartridge. Ensure one end of the filter is marked 30 microns. Place it on the filter near the side of the water tank wire strainer. Then put on the filter bottle and use the filter bottle wrench to tighten the filter bottle.

5



[Replace and install 50-micron filter]

Prepare a new cartridge. Ensure one end of the filter is marked with 50 microns. Place it on the filter on the side away from the water tank wire strainer. Then put on the filter bottle and use the filter bottle wrench to tighten the filter bottle.

6

Maintenance - Filter cartridge replacement

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[Close water tank cover]

7



[Close top lid]

8



[Withdraw drain pipe]

Withdraw drain pipe after ensure the cap is lightly closed.

9

Maintenance - Roller brush replacement

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[Remove front bumper shell]

Pull up the buckle to remove the front bumper shell.

1



[Remove roller brush]

Take front roller brush out from left side of robot. Long press the button on the latch and take the latch out. Then remove the metal cover and take the roller brush out.

Take rear roller brush out from right side of robot in the same way to front roller brush.

2



[Install new roller brush]

Prepare a new roller brush, insert it front left side and reach to the gear, while hold it with one hand. When the gear joined, install the metal cover. Push it from bottom to up to the two locking screws. Then align it the hole of latch, insert the latch. Make sure the latch was locked lightly.

3

Maintenance - Roller brush replacement

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[Close the front shell]

4

[Replacement for different brush]

The replacement steps for front&rear roller brush, bristle brush, cloth brush are the same.

5

Maintenance - Rubber strip replacement

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[Switch robot to manual mode]

Press auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off.

1



[Push robot to maintenance point]

2



[Remove the rubber strips]

Press the black button on the squeegee and remove inner and outer rubber strips.

3

Maintenance - Rubber strip replacement

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[Install new rubber strips]

Prepare a new set of rubber strips. Install the inner strip first which has gaps on it. Press the button on squeegee and install the strip.

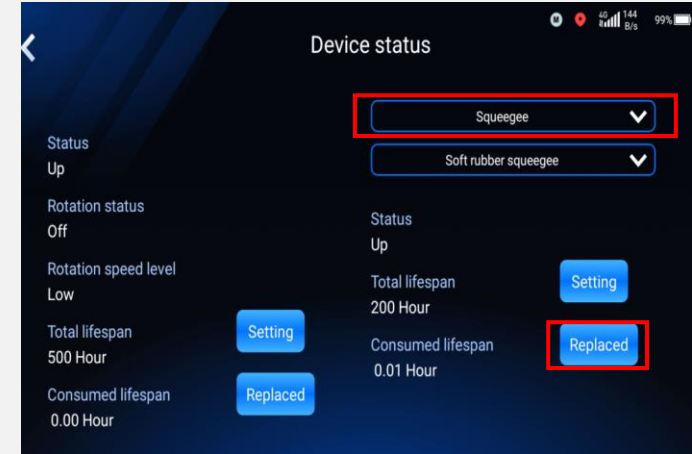
4



[Check the stability of rubber strip]

Shake the strip after install to ensure it is well installed. Use the same way to install the outer strip.

5



[Reset the lifespan]

After the replacement, click on the left navigation bar, select device status, go to "squeegee/dust mop", click on "replaced", click on "confirm"

6

Appendix - Daily maintenance checklist

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Daily Maintenance Checklist									
Weekly Maintenance Chart: ___/___/___ to ___/___/___ SN: _____									
Check Items	Details	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Note
Filters x2	Clean immediately after task completed								
	Different filter model, correctly installed in the corresponding position								
	No damage, good water permeability								
Watertank	Clean immediately after task completed								
	No residual water stains on the outside of the water tank								
	Water tank cover is well sealed								
Mesh Filtersx2	Clean every week								
	No damage, rust, deformation								
Filter bag x1	Clean immediately after task completed								
	No damage, good water permeability								
Brushes/padsx2	Clean the bottom and surrounding garbage								
	No damage or deformation								
Squeegee blade x2	Clean with rag immediately after task completed								
	No damage or abnormal wear								
	Good connection to the ground, no abnormal noise								
Squeegee caster x2	Clean with rag immediately after task completed								
	Smooth movement, no abnormal noise, no abnormal wear								
Robotcleaning	No water stains and no dirty on the robot body								
	Sensor has no residual water stains and no dirty								
	No obvious dirty on the chassis, skirts, filters, etc								
<p>Note: The above items shall be inspected after daily cleaning. If any abnormality is found, please deal with it or replace it in time. If in doubt, please contact the supplier's service engineer.</p>									

Questions?

www.smartservant.nl/helpdesk