

GS-Ecobot Scrubber

50

TROUBLESHOOTING MANUAL



Date of Issue: [13] [04], 2023

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INTRODUCTION

The Cleaning Robot Scrubber 50 by Gausium (alias "Gaussian Robotics"), Singapore, is a fully autonomous cleaning robot that can automatically charge, dispense, and refill all by itself.

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1. TROUBLESHOOTING

The scrubber may not work as you expected. Based on the data fed back by the technical support personnel, we have measured the most common failure situations, and given effective troubleshooting methods and solutions for the above failure situations. In the event of a failure, you can refer to the following table for first-time troubleshooting.

Fault Phenomenon	Probable Causes of Fault	Solution
Unclear or double-created map	The scrubber moves at a high speed, resulting in an inadequate quality of the created map.	Please control the scrubber to move at a slow speed during mapping.
	The sensor is contaminated with dust or blocked by obstacles.	Clean the outside of the laser sensor with a dust-free cloth. Check whether there is any foreign object near the sensor. If so, please remove it in time.
	The environment where the scrubber is located is complicated, and there are high-transparency materials such as glass walls.	During mapping, if it is found that there are high-transparency materials in the surrounding environment, please draw a visual wall in time to control the map boundary.
Indistinct or ghosting drawing	The traveling speed of the robot is too fast, resulting in poor-quality mapping.	Please control the robot to run at a slower speed to scan the map.
	The sensor is dusty or obscured by obstacles.	Clean the outside of the laser sensor with a dust-free cloth, check if there are foreign objects near the sensor, and remove them if any.
	The environment is more complex, and there are glass walls and other high-permeability materials.	When mapping, if high-permeability materials are found in the surrounding environment, please draw a virtual wall to control the map boundary.
Initialization failed	<ol style="list-style-type: none"> 1. The wrong map has been chosen 2. Not located at the marked point 3. Surrounded by the crowd at a short distance 	<ol style="list-style-type: none"> 1. Choose the correct map 2. Push to the marked point 3. It is prohibited to be surrounded by the crowd
Robot does not move	The robot has no power, cannot turn on, and cannot move.	Please connect the charger to the charging port of the robot to charge, and then control the movement of the robot after the battery is fully charged.

	The scrubber is powered off, and it cannot be started and moved.	Please insert the key into the start-up keyhole on the control panel and rotate the key to start the scrubber. Then, try to control the scrubber to move.
	The implemented mode is the automatic mode	It is necessary to switch to manual mode by hand.
	The red emergency stop button on the control panel is pressed, which results in emergency braking of the scrubber and prevents it from moving.	Please turn the red emergency stop button clockwise and release it to restore the movement function of the scrubber.
The robot roller brush fails to rotate	The roller brush button on the control panel is closed and cannot start cleaning.	Open the roller brush button on the control panel and turn it on to see if the roller brush is put down close to the ground.
	The brush is wound around the wire garbage, and it is stuck and thus fails to rotate.	Please remove the roller brush for cleaning. After cleaning, install it back into the scrubber.
	The full-tank indicator of the recovery tank or the empty-tank indicator of the freshwater tank on the control panel is steady red, indicating that the recovery tank is full or no clean water is in the freshwater tank, and the scrubber cannot continue cleaning.	Drive the scrubber to the maintenance zone to drain sewage, add clean water, and then continue cleaning.
The scrubber fails to absorb water	The squeegee mount is not set down.	Press the button of the squeegee blade on the control panel to open it and observe whether the squeegee blade is put down.
	The suction button on the control panel is closed so water cannot be absorbed.	Press the suction button on the control panel to open it and check whether the suction function works.
	The full-tank indicator of the recovery tank or the empty-tank indicator of the freshwater tank on the control panel is steady red, indicating that the recovery tank is full or no clean water is in the freshwater tank and the scrubber cannot continue cleaning.	Drive the scrubber to the water room to drain sewage or add clean water, and then continue cleaning.





	The connection of the water suction hose is improper, or the water suction hose inhales unidentified objects, causing a blockage.	Check whether the water suction hose is properly connected to the front of the squeegee blade and the recovery tank and whether there is any blockage. If there are any, please adjust or remove them in time.
	There is solid residue adhered to the squeegee blade, or the squeegee blade deforms or is severely damaged and worn, affecting the water-gathering effect.	Clean the squeegee blade, adjust the structural shape, or directly use a new squeegee blade.
The cleaning effect of the scrubber is poor	The brush has not been cleaned for a long time and is contaminated with a lot of dust and dirt, which affects the cleaning effect.	Remove the roller brush for cleaning and install it back into the scrubber after cleaning.
	The brush is severely worn, and the cleaning performance is poor.	Replace with a new roller brush of the same specification.
	The type of brush does not apply to the floor type. For example, a brush is used to clean an epoxy floor.	Please refer to the instructions for consumables, and select a brush or cleaning pad suitable for the floor material for cleaning.
	The floor to be cleaned is quite dirty or there is a large solid waste on it, so the scrubber cannot clean it all at a time.	Pick up the solid waste on the floor before cleaning, and then repeat the cleaning several times to ensure the best cleaning effect.
The scrubber cannot be charged	The power outlet is powered off and does not supply power.	Please make sure that the power outlet is powered. It is recommended that the charger be connected to another outlet for verification.
	The charger is damaged and cannot be charged.	Please check whether the indicator of the charger is steady red. If it is, charging is normal. If it is off or blinking, the charger is working abnormally. In this case, please contact AROS Technical Support personnel to apply for repair.
	The battery is damaged and cannot be charged normally.	If the charger functions normally, but the percentage of battery level does not increase with the extension of the charging time, it means that the battery is damaged or abnormal. In this case, please contact AROS Technical Support personnel to apply





		for battery replacement.
The scrubber cannot be started	<ol style="list-style-type: none"> 1. The air switch is off. 2. The battery runs out. 3. The key switch is not turned on. 	<ol style="list-style-type: none"> 1. Turn on the air switch. 2. Charge the battery. 3. Turn on the key switch.





If you have tried all the solutions to the above problems still exist, or if the problems you have met are not listed above, please contact AROS Technical Support for further assistance. Thank you for your co-operation.






2. SOLUTIONS FOR COMMON PROBLEMS

Problems	Possible Reasons	Solutions
Power-on failure	Air Switch 	Check if the air switch has been turned on.
	Battery Activation 	Remove the dust cover of the charging port in the robot and charge the robot for a while, then try to power it on again.
	Emergency STOP button engaged 	The robot will pause the current cleaning task when the emergency STOP button is pressed. Press the button again to continue the current cleaning task.
Intermittent lag		Press the auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off. Then, push the robot to the maintenance point in manual mode.
	Wipe external sensors	Check if there is contamination on the surface of the camera or laser, or if they are blocked by something





No actions after starting auto-operation		else. Use a soft, clean, and lint-free wipe to clean the surface of the sensors.
	Clean front horizontal laser 	Lift the latch of the front bumper and open the shell and clean the front horizontal laser. Close the shell after cleaning.
	Emergency STOP button engaged 	Check if the emergency STOP button was pressed. (Red liner light indicator means it was pressed, blue light means it has been released). If it was pressed, click "confirm" on the screen, and press the button again to continue the cleaning task.
	Robot lost locating 	Check if the robot lost locating. (White icon means locating is normal, red means lost). If the robot lost locating, push the robot to the landmark point for re-locating.
	Alarm message	Open "Health management" and check if there are alarm messages. If they cannot be resolved, please take photos, and contact us for support.



		
An abnormal noise from rubber strips	<p>Something adhered to strips</p> 	<p>Press the auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off. Then, push the robot to the maintenance point. Lift the squeegee and clean the strips with a clean wet wipe.</p>
	<p>Strips damaged or worn</p> 	<p>If the strip is damaged or worn, please do the replacement.</p>
Water stains left on the ground	<p>Something adhered to a strip</p> 	<p>Press the auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off. Then, push the robot to the maintenance point. Put on gloves and lift the squeegee to check if something is adhering to the strip. Clean strips with a clean wet wipe.</p>
	<p>Air leakage into the water tank</p>	<p>Remove the water tank cover and check if the sealing strip on it is good.</p>

		
	<p>The cap of the drainage pipe</p> 	<p>Check if the cap of the drainage pipe was closed tightly.</p>
	<p>The suction pipe is blocked</p> 	<p>Check if the suction pipe was inserted well or blocked. Loosen the locking screw and remove it and check for any blockage inside it.</p>
	<p>Improper height of squeegee</p> 	<p>Engage the squeegee to touch the ground. Check the height of casters and adjust it to achieve a 30-45° between the strip and the ground.</p>
	<p>The rubber strip is damaged or worn</p>	<p>If the strip is damaged or worn, please refer to the maintenance guide - rubber strip replacement to do the replacement.</p>

		
No or low water spray	<p>Filter timeout or overload</p>    	<ul style="list-style-type: none"> ➤ Press the auto/manual mode switch button for 3 seconds and confirm that the button indicator light is turned off. Then, push the robot to the maintenance point. ➤ Open the cap of the wastewater pipe and quickly put it down to drainage (<i>Kind reminder: hold the pipe upward when opening the cap</i>). ➤ Unplug the plug in the clean water tank after the wastewater tank has been emptied. The water in the clean water tank will flow into the wastewater tank. Then, continue to empty the wastewater tank using a wastewater pipe. ➤ Remove the filter bag, filter bottle & cartridge, and steel wire filter. ➤ Flush and clean the filter bag, filter bottle & cartridge, and steel wire filter. ➤ Put the water tank cover back. ➤ Close the top lid. ➤ Ensure the cap is closed tightly, then withdraw the drainage pipe.



Auto-charging failure	Power supply failure	Check the power supply to the workstation.
		
	Rear camera contaminations	Check if there is contamination on the surface of the rear camera, or if it is blocked by something. Clean it with a soft, clean lint-free wipe.
		
	Obstacles around	Remove all obstacles around the workstation and charging pile.
		
	QR code for docking dirty or damaged	Check if the QR code is dirty or damaged. Clean it with a clean wet pipe.
		
	Improper air switch position	Check and turn the air switch of the robot on.

		
		
Poor water absorption	The power adapter is damaged	Connect the power adapter with the robot first. Then connect the adapter to the 220VAC power supply. The flashing red indicator means charging is ongoing. If the indicator is off, it means the power adapter could be damaged. Please contact AROS Technical Support for assistance.
	The rubber is worn and damaged	Change rubber.
	The suction outlet of the water-sucking scratcher is blocked	Remove dirt.
	The water tank cover is not well covered	Readjust the water tank cover.
	The suction volume of the cleaning configuration is too small	At least, ensure that the suction volume is greater than 70%.
	The caster wheel is loose	Readjust the height of the caster wheel to make the rubber contact the ground best.
	Excessive water, over 30%	The amount of water sprayed on the marble floor should be kept at 20% ~ 25%.
Filtration overload	The steel mesh of the sewage tank is damaged or dirty	If damaged, it should be replaced; if it is too dirty, it should be cleaned.
	The filter element of the clean water tank is too dirty	Clean or replace the filter element.
	Problems with the filter pump body	Replace the pump.
	The water pipe is bent or blocked	Straighten the water pipe and replace it if it cannot be restored. If the blockage is serious, replace it.
Water-spraying overload	The steel filtering screen of the clean water tank is too dirty	Clean or replace the steel filtering screen.

No spraying	The solenoid valve is damaged	Replace the solenoid valve.
	The amount of clean water in the clean water tank is too small	Add clean water.
	The steel filtering screen of the clean water tank is too dirty	Clean or replace the steel filtering screen.
	The solenoid valve is damaged	Replace the solenoid valve.
	The electric ball valve is damaged	Replace the electric ball valve.
	The water pipe is broken or leaked	Replace the water pipe.
No filtering	The filtering function is turned off by the tool on the APP main interface	Turn it on manually.
	The water level of the sewage tank did not make the third floating ball float	Without treatment, the sewage will be automatically filtered when it reaches a certain water level.
	The steel mesh of the sewage tank is too dirty	Clean or replace the steel mesh.
	The filter element of the clean water tank is too dirty	Clean or replace the filter element.
	The filter pump body is damaged	Replace the filter pump.
There are wheel marks on the ground	Check the wheels for dirt	Clean the rubber coating of the rear wheel with a brush.
	There is a stained layer on the surface of the ground	Clean it with Gaussian special detergent.
	The wheel encapsulation is hard	Replace it with the wheel with softer encapsulation.
Locating failed	The robot is not within 2 m of the landmark point	Push it within 2 m of the landmark point.
	The wrong floor is selected	Move it to the right floor.
	The location and environment of landmark points change too much	Delete old landmark points and create new landmark points.
Running is stuck or the head swings	Dirty sensor	Please wipe it gently.
	Scratched sensor	Replace parts.
	Impacted by strong and direct light	Contact the after-sales personnel for handling.
	Inaccurate TF	Calibrate TF.
No voice for obstacle avoidance	The power amplifier is turned off	Turn on the power amplifier.
	No voice files	Contact the after-sales personnel for assistance. In the future, customized voice content will be supported.
	System problems	Contact the after-sales personnel for assistance.

	Speaker failure	Replace the speaker.
Robot cannot be charged	The air switch is disconnected	Close the air switch manually.
	Damaged charger	Contact the after-sales personnel to replace parts.
	The plug-in row is not powered	Replace the plug row or change the charging position.
Stop in automatic task	Full sewage tank	Discharge sewage.
	Empty clean tank	Add clean water.
	The wheel is stuck	Move the robot manually and solve environmental problems.
	Other faults	Check the APP alarm and contact after-sales personnel for handling.
Unable to enter APP	Loose network cable leads to disconnection of host and slave computers	Re-insert the network cable and tighten it.
	Loose network cable of the all-in-one robot	Re-insert the network cable and tighten it.
	All-in-one robot failure	Replace the all-in-one robot.
	Control box failure	Replace the control box.
	System failure	Update the system version.
The brush/water-sucking scraper cannot be lowered	No lowering is set under cleaning mode	Reset the cleaning mode.
	Structural interference results in the inability to lower	Confirm the interference position for structural adjustment or replacement of components.
	Push-rod motor failure	Replace the pushrod motor.
	Drive failure	Update parameters and replace the drive.