



www.robotshop.com

La robotique à votre service!^{MC} - Robotics at your service!TM



Roomba 500 Series Servicing and Repair Guide

Chapter 1: What Is Roomba Saying To Me?

If your Roomba 500 series is having a problem or is not working properly, it will communicate this to you by speaking, beeping, playing songs, and flashing lights. The following tables are essential in understanding possible problems the Roomba can have. Roomba will tell you what problem it has in order for you to know what to correct. These tables illustrate the most common error codes, what they mean, and how to resolve them. Some of the 500 series Roombas are pictured below:



Please note that if your Roomba is under warranty, servicing the robot will void the warranty. For robots under warranty, please consult the warranty policy of the distributor where purchased, and/or contact iRobot's customer service.

Troubleshooting Errors:

Roomba Beeps	Roomba says	What it Means	What You Should Do/Possible Fixes
1 beep	Error 1: Move Roomba to a new location then press CLEAN to restart.	Roomba has a wheel hanging down, or Roomba is stuck.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Check the side wheels for obstructions. • With the robot on its back, push the wheels up and down several times to make sure nothing is stuck. Turn the wheels by hand to see if they both have the same amount of resistance. • Clean the wheel assembly out with compressed air and/or a vacuum. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace the wheel motor assembly.
2 beeps	Error 2: Open Roomba's brush cage and clean brushes.	Roomba main brushes are not able to turn.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Check the brushes for any debris caught in them, and make sure they are installed the right way. • Clean the brushes and their bearings. • Replace brushes if worn. • Clean brush casing and gears. Replace them if worn. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace brush motor.

5 beeps	Error 5: Spin Roomba's side wheels to clean.	One of Roomba's side wheels is stuck.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Check the side wheels for obstructions. • With the robot on its back, push the wheels up and down several times to make sure nothing is stuck. Turn the wheels by hand to see if they both have the same amount of resistance. • Clean the wheel assembly out with compressed air and/or a vacuum. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace the wheel motor assembly.
6 beeps	Error 6: Move Roomba to a new location then press CLEAN to restart.	Roomba's cliff sensors are dirty, or Roomba is stuck over a cliff.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Wipe down the cliff sensors with a clean cloth, and clean them with compressed air. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace the cliff sensors.
7 beeps	Error 7: Spin Roomba's side wheels to clean.	One of Roomba's side wheels is stuck.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Check the side wheels for obstructions. • With the robot on its back, push the wheels up and down several times to make sure nothing is stuck. Turn the wheels by hand to see if they both have the same amount of resistance. • Clean the wheel assembly out with compressed air and/or a vacuum. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace the wheel motor assembly.
8 beeps		Roomba's front wheel, or the Roomba itself is stuck.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Remove and clean Roomba's front caster wheel. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace front caster wheel if worn.
9 beeps	Error 9: Tap Roomba's bumper to clean.	Roomba's bumper is stuck in, or its bumper sensors are dirty.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Clean between Roomba's bumper and frame from underneath along the bumper's whole length. • Push Roomba's bumper in and out several times to make sure it moves correctly. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace Roomba's IR bumper sensor boards.
	Error 10: Spin Roomba's side wheels to clean.	One of Roomba's side wheels is stuck, or its bumper has not registered an obstacle.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Check the side wheels for obstructions. • With the robot on its back, push the wheels up and down several times to make sure nothing is stuck. Turn the wheels by hand to see if they both have the same amount of resistance. • Clean the wheel assembly out with compressed air and/or a vacuum. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace the wheel motor assembly. • Roomba may be cleaning in too large a room. Try running Roomba in a smaller room or reconfigure the obstacles in the room.
11 beeps		Roomba's bumper has not registered an obstacle.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Roomba may be cleaning in too large a room. Try running Roomba in a smaller room or reconfigure the obstacles in the room.

12 beeps		One of Roomba's cliff sensors is broken or dirty.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> Wipe down the cliff sensors with a clean cloth, and clean them with compressed air. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> Replace the cliff sensors.
	Please charge Roomba.	Roomba's battery needs to be charged.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> Charge Roomba using either the home base, or connected directly to a charger.
	Please inspect and clean Roomba's cliff sensors.	Roomba's cliff sensors are dirty or broken.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> Wipe down the cliff sensors with a clean cloth, and clean them with compressed air. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> Replace the cliff sensors.
	Please inspect and clean Roomba's wheels.	One of Roomba's side wheels is stuck.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> Check the side wheels for obstructions. With the robot on its back, push the wheels up and down several times to make sure nothing is stuck. Turn the wheels by hand to see if they both have the same amount of resistance. Clean the wheel assembly out with compressed air and/or a vacuum. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> Replace the wheel motor assembly.
	Please remove and clean Roomba's brushes.	Roomba main brushes are not able to turn.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> Check the brushes for any debris caught in them, and make sure they are installed the right way. Clean the brushes and their bearings. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> Replace brushes if worn. Clean brush casing and gears. Replace them if worn. Replace brush motor.

Charging Errors:

Roomba blinks/says...	What it Means	What You Should Do
1 blink / Charging Error One	Roomba's battery is not connected.	<ul style="list-style-type: none"> • Make sure battery is installed in the robot, and that battery pull-tab is fully removed.
2 blinks / Charging Error Two	Roomba has a charging error.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Let Roomba cool down for about an hour. • Charge Roomba in a cooler environment. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace the battery or the motherboard if the problem persists.
3 blinks / Charging Error Three	Roomba has a charging error.	<ul style="list-style-type: none"> • Reset Roomba, and try recharging it again.
5 blinks / Charging Error Five	Roomba has a charging error.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Make sure the battery pull-tab is fully removed from Roomba. • Reset Roomba, and charge it until the CLEAN light turns green. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • Replace the battery or the motherboard if the problem persists.
6 blinks / Charging Error Six	Roomba's battery overheated.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Let Roomba cool down for about an hour. • Charge Roomba in a cooler environment. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • The battery may be defective and need replacing.
7 blinks / Charging Error Seven	Roomba's battery is not cooling down.	<p><u>First Try:</u></p> <ul style="list-style-type: none"> • Let Roomba cool down for about an hour. • Charge Roomba in a cooler environment. <p><u>Otherwise you may need one of the following repairs:</u></p> <ul style="list-style-type: none"> • The battery may be defective and need replacing.

Please note: the above information is reproduced in part or in whole from iRobot's website. RobotShop is not the author or owner of this information; it is the property of iRobot.

Looking for a different guide? Please see the full list of repair guides available at the [Ultimate Roomba Resource Center](#).