

Roomba 600 Series

Independent Repair & Troubleshooting Reference

This is an independently researched and written reference guide compiled from publicly available repair documentation, iRobot's own published error-code charts, and community repair sources. It is **not** an official iRobot manual and is not affiliated with, endorsed by, or sourced from iRobot's internal service documentation.

Applies to Roomba 600-series models (605, 614, 630, 650, 652, 655, 675, 690, and similar variants).
Exact button layouts and voice-prompt wording vary slightly between individual models in this series.

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1. Identifying Your Model

Flip the Roomba over. The model number is printed on the underside near the left wheel. The 600 series includes several sub-models (605, 614, 630, 650, 652, 655, 675, 690, and others) — these share the same core mechanical design and most of the troubleshooting steps in this guide apply across the whole series, with minor differences noted where relevant.

The 600 series uses two counter-rotating circular brushes on the underside, independent drive wheels that allow in-place turning, and height-adjusting brush contact for different floor types. Some models in this series (675, 690) include Wi-Fi connectivity; earlier models (605, 614, 630, 650) do not.

2. Routine Maintenance Schedule

A large share of 600-series problems are maintenance issues, not hardware failures. Keeping to this schedule prevents most of the errors covered later in this guide.

Part	Recommended Frequency
Dust bin	Empty after each cleaning run
Filter	Clean weekly (more often with pets)
Main brushes	Clean weekly (more often with pets)
Front caster wheel	Clean every 2 weeks
Side brush & cliff sensors	Clean monthly
Charging contacts (robot & dock)	Wipe clean monthly, or at first sign of charging errors

3. Error Code Reference Chart

The Roomba 600 series announces errors as a spoken message plus a blinking Troubleshooting indicator light — the light blinks a number of times matching the error code. Press CLEAN once to repeat the spoken message if you missed it.

Note: some error numbers mean something different on other Roomba series (i, j, s). This chart covers the 600-series-specific meanings.

Error	Meaning (600 series)	Fix
1	Side wheel stuck / hanging	Flip robot over, check both side wheels for debris; press each wheel to confirm it spins.
2	Main or side brush jammed	Remove brushes, cut away wrapped hair/thread with scissors, clean the brushes.
3 / 5 / 9 (charging)	Charging system fault — dirty contacts, non-OEM battery, or failed dock base	Wipe battery contacts and dock base charging contacts with a dry or slightly alcohol-damp cloth.
5 (non-charging)	Side wheel drive stall (either side wheel on 600 series)	Remove hair/debris from the wheel axle; spin wheel by hand to confirm it turns.
6	Dirty cliff sensor(s)	Wipe all four cliff sensors on the underside with a dry cloth.
11	Battery failure	Common after 2–3 years of use — battery capacity naturally degrades. See Battery Replacement for more information.
14	Bin missing or not seated	Reinstall the dust bin fully, then press CLEAN to restart.

4. Charging & Battery Problems

Symptom: Roomba won't charge / shows a charging error

This resolves the issue roughly 70% of the time: flip the robot over and wipe the two metal charging contacts on the bottom with a dry cloth. Do the same for the contacts on the Home Base. Dust and oxidation build-up on these contacts is the single most common cause of charging failures.

If cleaning contacts doesn't help, check that the battery hasn't shifted internally (common after a drop): flip the robot, remove the 4 screws on the battery compartment, take the battery out, inspect the terminals for corrosion, and reseal it firmly.

Symptom: Roomba runs for a short time then dies, or won't return to dock

This usually indicates a battery that has degraded past useful capacity — normal after roughly 2–3 years of regular use. This is what error code 11 refers to. Replacement is the standard fix; see Section 7.

5. Brush & Roller Problems

Symptom: Main brush won't spin at all

If the brush is completely motionless (not just jammed with hair), this typically points to a failed main brush motor rather than a simple debris jam. The motor sits under a sticker on the robot's underside, beneath the brush assembly. Repair requires removing the battery first, then replacing the motor assembly — this is a more involved repair than a routine hair-clearing job.

Symptom: Brush turns slowly or intermittently (Error 2)

Remove both brushes from the brush cage. Use scissors to cut through any wrapped hair, thread, or string around the brush ends and bearings — this is the far more common cause than a failed motor. Clean the brush cage itself before reinstalling, since debris there can also restrict movement.

Safety: power the robot off completely before working on the brushes. The brush motor has enough torque that an accidental partial cycle can pinch fingers.

6. Wheel & Movement Problems

Symptom: Roomba spins in circles instead of cleaning normally

Almost always caused by debris trapped in one or both side wheels, restricting how freely they turn. Flip the robot over, remove visible hair/debris from both wheel wells, and spin each wheel by hand to confirm both move with similar resistance. A mismatch between the two wheels' resistance is the giveaway.

Symptom: Error 1 — wheel stuck / hanging

Check that both side wheels retract and extend freely by pressing on them. A wheel that stays extended (as if hanging in the air) after Roomba drove over an edge or thick rug transition is the most common

trigger — this isn't necessarily a hardware fault, often just a wheel needing to be manually reset by pressing it back in.

7. Battery Replacement Procedure

Depending on the specific 600-series model, the battery is either lithium-ion (Li-ion) or nickel-metal hydride (NiMH). Confirm the correct replacement type for your specific model before ordering a part.

- 1 Turn the Roomba off completely — hold CLEAN until the lights turn off.
- 2 Flip the robot over.
- 3 Remove the screws on the battery compartment cover (4 screws on most 600-series models).
- 4 Remove the old battery and inspect the compartment terminals for corrosion or damage.
- 5 Insert the new battery, matching terminal orientation exactly.
- 6 Replace the cover and screws.
- 7 Dock the robot on the Home Base and allow a full initial charge (typically 2–3 hours) before first use.

If the robot doesn't power on after a battery swap even though it appears seated correctly, double-check terminal orientation and clean any corrosion from the compartment's metal contacts before assuming the new battery is defective.

8. Reset Procedures

Software reset (500 & 600 series): Press and hold the SPOT and DOCK buttons together for approximately 10 seconds until you hear the reboot tone. Note this will clear any scheduled cleaning times, which will need to be reprogrammed afterward.

Wi-Fi-only reset (675/690 and other Wi-Fi-equipped 600-series models): Hold DOCK + SPOT + CLEAN together for 10 seconds, then re-add the robot as a new device in the iRobot Home app.

9. Safety Notes

Always power the robot off before opening the brush cage, battery compartment, or any internal panel. The main brush motor has significant torque — keep fingers clear while testing brush movement. Inspect any removed battery for swelling, leaking, or damage before reinstalling or disposing of it, and recycle batteries through a proper battery recycling program rather than regular trash.

10. Sources

This guide was compiled and independently written from the following publicly available sources. No content was copied verbatim from any source — all explanations here are original.

- iRobot Customer Care — Roomba 600 Series Error Messages Chart (homesupport.irobot.com)
- iRobot Roomba 600 Series Owner's Manual (official operation & troubleshooting documentation)
- iFixit — iRobot Roomba 600 Series repair & troubleshooting community pages
- Community and independent repair-guide sources covering brush motor, wheel, and charging repairs

This document is provided for informational purposes as an independent reference. For warranty repairs or issues not resolved by these steps, contact iRobot support directly.