

Roomba i 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 i3, i3+, i4, i6, i6+, i7, i7+, i8 and similar i-series models

How errors are announced: A solid red light ring around the CLEAN button, plus a narrated voice message (a change from the blinking-light indicator used on older series). Press CLEAN, or the bumper, to repeat the message.

i-series robots use camera-based visual navigation, which behaves differently from the bump/IR-sensor navigation on 500-900 series models — several of the fixes below (camera lens cleaning, lighting, re-mapping) don't apply to older mechanical-navigation models.

Compiled by DIYFixIt.tech • For personal repair reference use

Contents

1. Routine Maintenance Schedule
2. Error Code Reference Chart
3. Common Problems & Repairs
4. Battery Replacement Procedure
5. Reset Procedure
6. Safety Notes
7. Sources

1. Routine Maintenance Schedule

A large share of problems on this series are maintenance issues rather than 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	Replace roughly every 2 months
Main brushes	Replace roughly every 6 months (clean weekly)
Camera lens (top or front, depending on model)	Wipe gently with a dry microfiber cloth weekly, or any time navigation seems off
Cliff sensors	Clean monthly
Charging contacts (robot & dock)	Wipe clean monthly
Smart Map	Delete and re-map after any significant furniture rearrangement

2. Error Code Reference Chart

Error	Meaning	Fix
2	Brushes need clearing	Remove and clear wrapped hair/debris from the brushes and brush cage.
6	Cliff sensor issue / uneven ground detected	Wipe the cliff sensors on the underside; avoid running on surfaces with sharp edges.
14	Bin or filter not properly installed	Reinstall bin and filter fully; wipe contacts with a dry cloth.
17	Navigation problem — cleaning job cancelled	Clean the camera lens on top of the robot, ensure adequate ambient lighting.
43	Stuck in a Virtual Wall or Home Base infrared beam	Move the robot to a new location and press CLEAN. Check that Virtual Wall is properly installed.

3. Common Problems & Repairs

Symptom: Error 17 — navigation problem, job cancelled mid-clean

i-series robots use a camera on top of the unit for visual navigation, unlike older IR/bump-sensor-based series. A dirty camera lens, poor ambient lighting, closed doors, or recently moved furniture are the most common triggers. Wipe the camera lens with a dry microfiber cloth first — a smudged lens is the single most common cause.

Symptom: Roomba keeps stopping near its Home Base or a Virtual Wall

This is Error 43 — the robot has driven into the infrared beam the Home Base or a Virtual Wall emits to guide/block it, and gotten stuck there. Clear clutter from around the Home Base and confirm Virtual Walls aren't positioned facing one another.

Symptom: Roomba's map seems wrong after furniture was rearranged

Camera-based navigation relies on a saved map of visual landmarks. After any significant furniture move, delete the old map in the iRobot Home app and let the robot build a fresh one — reusing a stale map after a layout change is a common cause of repeated navigation errors.

Symptom: Navigation gets worse at night or in dim rooms

Camera-based Roombas need ambient light to navigate reliably and struggle in near-total darkness. Leave at least one dim light on if scheduling cleanings after dark, and avoid running the robot in a fully blacked-out room.

Symptom: Runtime has dropped noticeably compared to when the robot was new

Battery capacity naturally declines with charge cycles. If runtime drops well below the original spec (roughly 75 minutes on most i-series models when new) after 2+ years, battery replacement is the standard fix — see Section 4.

4. Battery Replacement Procedure

i-series battery access differs from older mechanical-navigation models — it involves removing the side brush first, then 5 bottom-cover screws (vs. 4 on 500-900 series). Steps below are based on iRobot's own published i-series and i7 teardown documentation.

- 1 Turn the Roomba off and close the iRobot Home app on your phone.
- 2 Flip the robot so the underside faces up.
- 3 Loosen the screw holding the Edge/Side Sweeping Brush and remove it.
- 4 Loosen the five screws retaining the bottom cover (Phillips #1 screwdriver).
- 5 Carefully remove the bottom cover — use a plastic prying tool if it's stuck, rather than force.

- 6 Before touching the battery, confirm it isn't hot, swollen, or leaking.
- 7 Unclip the old battery and lift it out (a prying tool can help if it's snug).
- 8 Insert the new battery into the battery well until the retaining tab clicks into place.
- 9 Reassemble the bottom cover and side brush in reverse order.
- 10 Hold the CLEAN/start button for about 10 seconds before the first charge, then charge fully and reconnect to the app.

5. Reset Procedure

Hold the CLEAN button for approximately 20 seconds to reboot. For a full factory reset (erases maps, schedules, and Wi-Fi credentials), use Settings within the iRobot Home app instead.

6. Safety Notes

Always power the robot off before opening any panel, brush cage, or battery compartment. Brush motors have significant torque — keep fingers clear while testing brush movement. Before removing any battery, confirm it is not hot, swollen, or leaking — a damaged lithium-ion battery can release hazardous gases. Recycle old batteries through a proper battery recycling program rather than regular trash.

7. Sources

Compiled and independently written from iRobot's official error message charts and support articles (homesupport.irobot.com, support.irobot.ca), iFixit's community repair guides, and other independent repair documentation. No content copied verbatim.

Provided for informational purposes as an independent reference. For warranty repairs or unresolved issues, contact iRobot support directly.