The malfunctions – Technical Self-Balancing Scooter Fix Tips

The technology inside the self-balancing scooter is a still new and innovative concept, which is not developed to reach its full potential.

The scooters took over the world rapidly, and the demand kept rising significantly, so the manufacturers started producing the products on the assembly line.

This situation brings us to the position where the many people experienced some problems, and some are manageable, and some aren’t.

Calibration problems

The most common problem people run into is losing the balance and responsiveness to the tilting. It can be solved by a simple recalibration.

The red light in the middle of the scooter signals when there is a problem.
To recalibrate your self-balancing scooter, perform these steps:

- Make sure your scooter is turned off
- Put the board on the flat surface, making it perfectly straight.
- Align the two scooter sides entirely
- Press and hold the Power button for five seconds
- Release the Power button after the lights start flashing. That commences the calibrating process.
- Leave the scooter to calibrate itself

After the performed sequence, the scooter will be calibrated and ready to use.

Pads stuck problem

The next common problem can manifest with the pads on the board getting stuck, providing constant pressure to the lights and not sensing the rider’s foot.

In this scenario, you should try to unstuck the boards by applying hand pressure to get them back into the designated position. Make sure your board is turned off before doing anything, so you can remove the wires that might get in the way.

If this doesn’t help, you can try doing the same practice, but with additional pressure from the inside of the scooter. Remove the lower plastic cover, and try to reposition the pads. This practice usually solves this problem.

Bonus – Stuck power on/off button – easily solvable, just removing the cover and using your hands from both sides of the button will solve it. Make sure you don’t mess up some wires or left some wires out of the cover.
Infrared sensors issues

Next, we have an infrared sensor issue. This is the problem where the scooter loses the ability to function correctly and starts shaking when the rider steps on.

The problem is on the inside of the sensor mechanism, where small pieces of rubber interrupt the aligned communication of the sensor mechanism. Here’s how to fix this problem.

**IMPORTANT INFO: IF YOU’RE NOT A SKILLED OR TECH-SAVVY PERSON, DON’T ATTEMPT TO REPAIR ANYTHING BY YOURSELF. MAKE SURE YOU HAVE A WARRANTY AND CONTACT YOUR SUPPLIER OR A PROFESSIONAL HANDYMAN.**

First, remove the cover to unveil the sensor. Watch for cables connecting the cover with the logic board.

**Bonus Tip:** Make a photo of the connected cables so you can reconnect them quickly.

Next, remove the four screws holding the sensor and unveil the rubber pieces.
Use the scissors to cut the rubber for 1,5 millimeter. That will ease up the communication of the infrared sensor in the scooter.
Self-Balancing Scooter Power issues

The power issues are next common problems that users encounter having a self-balancing scooter. There are two variations of the problem:

- Scooter loses contact with charging port so that the scooter won’t charge
- Scooter loses contact with power supply, so the scooter won’t start again after the charge

To manage with the contact use these steps:

- Turn the board
- Remove the cover so you can have access to the circuits and wires.
- Inspect the wires of the system for damaged sections. If you find some damage, make sure to fix it with the fixing tape, or replace the whole cable.

Inspect the capacitors on the logic board. The transistors on the board send a lot of electronic signals to the logic board, so they can fry spontaneously due to extensive use.
If you find black markings like from fire, make sure to either replace them or replace the whole logic board.

**IMPORTANT INFO:** MAKE SURE YOU’RE FREE OF STATIC CHARGE, WEARING COTTON, AND POLARIZE YOURSELF. RUBBER GLOVES ARE THE BEST SOLUTION WHEN WORKING ON CIRCUITRY.

IF YOU’RE NOT TECH-SAVVY OR SKILLED WITH TECH REPAIRS, DON’T ATTEMPT ANY REPAIRS BY YOURSELF. CONTACT THE PROFESSIONAL SERVICE OR THE DEALER. MAKE SURE YOU HAVE A WARRANTY AND USE IT.

Engine Failure

After some time and riding, the board loses one engine and becomes useless. The LED light starts flashing without turning off, and the engine seems dead.

This is a problem with infrared balance sensor, and not related to the rubber pieces mentioned before.
You have to replace the board that reads the signals of the infrared moving system. If the problem might be too much for a non-tech-savvy people, and, in that case, you might want to handle it to a professional. Check your warranty and communicate with the dealer.

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Prevent malfunction of your self-balancing scooter with these safety tips:

**Protect your device**

The self-balancing scooter is sturdy, and reliable transportation device. On the other hand, after some riding and falls, some scratches appear.

You should protect your device with some hockey tape, or other types of protective tape to prevent malfunctions and outside impacts.
There are even some carbon skins and stickers to further enhance protection and the design.

Make sure you’re using it well charged and don’t ride it until the battery is full

The battery and circuits inside the scooter can wear off or get damaged with intensive usage, or over-usage (overweight, downhill with big speeds, collisions).

The proper functioning is ensured with charging the device to the fullest, and then using it until it’s on the 15% of the battery. Look at the battery indicator in the middle of the device.

Make sure all screws are in place and tightened.

Check the screws in the casing from time to time. It’s not a big work, and it goes a long way.

If you have opened your device before, ensure that the electric wires are connected well and protected.

Bonus – bundle them up with duck tape.
Avoid collisions, or dropping the self-balancing scooter

The inner circuitry and wires, processors and sensors are well protected inside the casing of the scooter.

However, there are some boundaries to this statement. If you keep colliding with other riders, or irremovable objects, you can expect a malfunction really soon.

The sensitive electronic equipment is not resistant to shocks and outside impacts, and with constant physical hits your scooter will die pretty soon.