# BowFlex Max Trainer SE: Resistance Issues

#### Common issue descriptions:

Resistance is not shown or displayed on console Inaccurate or inconsistent resistance level No resistance felt (too easy) or too much resistance (too difficult) Resistance will not adjust using the console buttons Resistance changes briefly, then returns to the original resistance setting

**Tools used in this guide**: 4mm hex key/Allen wrench, 13mm open-ended wrench, flathead screwdriver, Phillips head screwdriver (short)

Estimated time to complete: Approximately 45 minutes - two people may be required when checking cables.

Let's get started! We will check each of the components below (in order) to determine which is causing the issue.

- 1. Check resistance calibration
- 2. Cable connections
  - Connection behind the console
  - <u>Connection at the Base Hub</u>
- 3. Servo motor
- 4. Resistance sensor

## **Check resistance calibration**

Tools Required:	Estimated Time to Complete:
None	5 to 10 minutes

Before diving in, we will do a quick test to check if your Max Trainer's resistance needs to be recalibrated. Resistance calibration is needed after replacing your machine's Base Hub or Resistance Sensor.

- 1. Start a manual workout.
- Press the Up or Down button on the console to change the resistance.



3. Watch the console display to see how the resistance level changes:

#### If the display flashes with the selected level and then changes back to the original resistance setting:

- 1. Follow the instructions in <u>BowFlex Max Trainer SE: Resistance Calibration</u> to recalibrate your machine's resistance.
- 2. When the Resistance Calibration procedure is complete, we'll restart your machine and then test if the resistance settings adjust as expected [15596.O].
- 3. If the issue persists after calibration, continue troubleshooting in the next section below.

#### If the resistance displayed on the console does not change:

1. Continue troubleshooting in the next section below.

## Inspect the cable connection behind the console

Tools Required:	Estimated Time to Complete:
None	Less than 5 minutes

**Important:** Unplug the power cord from both the front of your machine and the electrical outlet before continuing

- 1. There is <u>one cable connection</u> at the back of the console. Be careful not to pinch or crimp the cable during troubleshooting.
- 2. Unplug the cables and check the following items before reconnecting:
  - Damage the cable and connector should be intact and undamaged. If the cable sheath is partially or fully cut, has a loose connector, or has missing/bent pins within a connector, <u>order a</u> <u>Main Mast Cable [15596.A]</u>.
  - **Connector Orientation** the console cable has a special tab on the connector to ensure it can only be installed in one direction.
  - **Connection Tightness** the cable connectors must be <u>firmly</u> pressed together to properly secure the connection.
- 3. Once the cable is reconnected, test if the issue persists [15596.B].
- 4. If the issue persists, check the next connection in the section below.







## Inspect the cable connections at the Base Hub

Tools Required:	Estimated Time to Complete:	Service Manual Procedure:
Phillips head screwdriver Flathead screwdriver 13mm open-ended wrench	20 to 30 minutes	Access the Base Hub Wiring Connections (click the link above to download the procedure)

#### Access the Base Hub

**Important:** Unplug the power cord from both the front of your machine and the electrical outlet before continuing.

- 1. We'll start by removing the rear shroud from the machine:
  - a. Grasp the rear shroud at the side openings.
  - b. Abruptly pull out and upward to release the shroud from the frame of the machine.
- 2. Next, remove the **left leg assembly** from the machine, allowing the other shrouds to be removed:
  - a. Remove the cap from the hardware securing the leg assembly to the frame.
  - b. Use a 13mm open-ended wrench to loosen and remove the hardware.
  - c. Set the hardware and leg assembly to the side for reassembly later
- 3. Next, we will use a Phillips head screwdriver to remove the left decorative shroud:
  - a. Remove the five screws attaching the decorative shroud to the structural shroud. The upper screw is located slightly under the structural shroud.
  - b. Gently pry outward from the top of the curve on the decorative shroud, disengaging the two round securing tabs at the top of the shroud
  - c. At the front of the machine, gently pry the decorative shroud outward to release the five securing tabs along the edge. Start with the tab at the top of the shroud and move down the edge as each tab is released.

**Helpful Tip**: A flathead screwdriver covered with a cloth or paper towel can be inserted and twisted between the decorative shrouds to help release the securing tabs.

- d. Remove the shroud and set it off to the side for reassembly later.
- 4. The Base Hub is located in the center of the machine on the frame near the drive pulley.

### Check the cable

**Important:** Unplug the power cord from both the front of your machine and the electrical outlet before continuing.

Click here to watch a video of the Base Hub cable connection being checked.

- There is <u>one cable connection</u> to inspect at the Base Hub. Be careful not to pinch or crimp the cable during troubleshooting.
  - The **Split Cable Assembly**, which transmits speed, servo, and resistance data to the Base Hub, is <u>plugged into the lower-right port of the Base Hub</u>.
- 2. Inspect the cable, making sure it is not damaged and is fully plugged into the Base Hub:
  - If damage is present (such as a partially or fully cut cable sheath, or a loose/damaged connector), <u>order a **Split Cable Assembly** [15596.C]</u>.







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- If undamaged, press on the Split Cable connection to confirm it is <u>fully</u> plugged into the Base Hub.
- Once we've verified the Split Cable is securely connected, we'll test to check if the issue is fixed [15596.D].
- 3. If the issue persists, check the next connection in the section below.

## Inspect the servo motor

Tools Required:	Estimated Time to Complete:	Service Manual Procedure:
None	10 minutes	Replace the Servo Motor Replace the Split Cable Assembly

#### Access the servo motor

**Important:** Unplug the power cord from both the front of your machine and the electrical outlet before continuing

- 1. No tools are needed for this step; we will access this through the rear shroud we removed in the previous section.
- 2. The servo motor is encased in a blue box, mounted to the frame on the opposite side of the Base Hub.

### Check the servo motor and cable

- 1. Inspect the servo motor for visible damage to the motor or casing. Starting at the servo motor, inspect the cable while following it to the end connector:
  - a. Check for cut, crimped, or frayed wires, loose connectors, and missing/bent pins within the connectors.
  - b. Firmly press the connectors together at the Servo Motor cable and Split Cable connection, then test if the issue persists [15596.F].
- 2. If the servo motor is damaged, order a Servo Motor [15596.G].
- 3. If the servo motor cable connection is damaged, the replacement item depends on which side of the connection is affected:
  - Servo Motor Cable: order a Servo Motor [15596.H].
  - Split Cable Servo Arm: order a Split Cable Assembly [15596.I].
- 4. If there is no damage, we will check if the servo motor is functioning properly by observing it during a workout. If you have someone available to help with this step, it is easiest to have one person working out and adjusting the resistance while the other watches the servo motor.
  - a. Plug the power cord back into your machine and the wall outlet.
  - b. Start a workout.
  - c. Adjust the resistance level on your machine from the console. Adjust the resistance all the way to the maximum resistance level, then back to no resistance.
  - d. While adjusting the resistance, check the console to make sure the correct resistance level is displayed. Watch the servo motor arm to make sure it moves when adjusted.
  - e. If the servo motor does not move when adjusted, order a Servo Motor [15596.J].
- 5. If the issue persists, check the next connection in the section below.









## Inspect the resistance sensor

Tools Required:	Estimated Time to Complete:	Service Manual Procedure:
None	Less than 5 minutes	Replace the Resistance PCB Replace the Split Cable Assembly

#### Access the resistance sensor

**Important:** Unplug the power cord from both the front of your machine and the electrical outlet before continuing

- 1. No tools are needed for this step; we will access this through the same rear shroud opening as the previous section.
- 2. The resistance sensor is small, black, and mounted on the frame side of the brake magnet assembly.

### Check the resistance sensor and cable

- 1. Inspect the resistance sensor for visible damage. Starting at the resistance sensor, inspect the cable while following it back to the Base Hub:
  - a. Check for cut, crimped, or frayed wires, loose connectors, and missing/bent pins within the connectors.
  - b. Firmly press the Split Cable connector into the Resistance Sensor, then test if the issue persists [15596.K].
- 2. If the Resistance Sensor is damaged, order a Resistance Sensor [15596.L].
- If the Base Hub to Resistance Sensor cable is damaged, <u>order a Split Cable</u> <u>Assembly [15596.M]</u>.
- 4. If the issue persists after all troubleshooting has been completed, please contact Customer Care to submit an Advanced Troubleshooting case for further troubleshooting. Our contact information is located at the bottom of this page [<u>15596.N</u>].

## Need to order replacement parts?

## 1 Customer Care Contact Information

Please contact Customer Care at 1-800-605-3369 for additional help or to order replacement parts. Some replacement parts may also be available for purchase <u>online here</u>. A list of part numbers referenced within this guide can be located at the bottom of this page.

### Customer Care - Hours of Operation:

Monday - Friday 6:00am - 5:00pm PST

The replacement part will be provided to you at no cost assuming your machine meets the warranty eligibility requirements. A Customer Care Agent will be able to assess your current warranty eligibility and provide you with your options.

Please note that if you did not purchase your machine directly from BowFlex, Schwinn, or Nautilus, we will need a copy of your purchase receipt in order to register your machine for warranty.

## 2 Parts Reference Table

Step 1



#### Steps 1 & 2

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Part Description	Part SKU
Console	8030699
Main Mast Cable	8030742
Resistance Sensor	8030414
Servo Motor	8031153
Split Cable Assembly	8030812

## 3 Contact Tech Team / Advanced Troubleshooting

If the issue was not resolved in the steps listed, contact the Tech Team or send an Advanced Troubleshooting case.

Submit a Case with case type Advanced Troubleshooting