

# Schwinn 490 Elliptical: Incline issues

ID: 15333.3

## **Have you received an "Incline Cooling" error message?**

This message appears when the incline motor gets hot; additional incline adjustments are disabled to prevent the motor from overheating. Once the incline motor has cooled down, the workout can be resumed.

No additional troubleshooting is required; it may take a few minutes for the motor to cool down.

### **Common issue descriptions:**

- Incline metrics are not shown or displayed on console
- Inaccurate or inconsistent incline level
- No incline movement
- Incline is stuck or will not adjust using the console or handlebar buttons

**Tools used in this guide:** Phillips head screwdriver, 6mm hex key/Allen wrench, 13mm open-ended wrench

**Estimated time to complete:** Approximately 20 to 30 minutes - two people may be required when checking cables.

**Let's get started!** We will check the components below to determine which is causing the issue. Depending on how the buttons respond in section 1, some components in this list may not need to be checked.

1. [Check the incline control buttons](#)
2. [Cable connection at the left upper handlebar](#)
3. [Input/Output cable connections](#)
  - o [Connection behind the console](#)
  - o [Connection at the bottom of the console mast](#)
4. [Incline adjuster assembly](#)

## **Check the incline controls on the console and handlebar**

<i>Tools Required:</i>	<i>Estimated Time to Complete:</i>
None	5 minutes

1. Let's start a workout to check your machine's incline controls.
2. Press the **INCLINE UP** and **DOWN** arrows on your console, taking note if the incline does not change when either button is pressed.
3. Now, let's adjust the incline again using the left handlebar UP and **DOWN** buttons. Same as before, note whether the incline changes when either button is pressed.
4. We will do more troubleshooting specific to which buttons do not work:

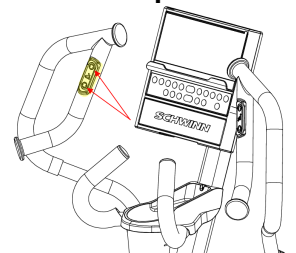
**If the console buttons adjust the incline, but the handlebar buttons do not:**

1. The issue is caused by the handlebar connection.

### **Step 2**



### **Step 3**



2. Skip to the [Inspect the cable connection at the handlebar](#) steps in the next section to continue troubleshooting.

If **both** the console and handlebar buttons **do not** adjust incline:

1. Let's start another workout, this time checking if the incline motor moves when using the **Incline Quick Level** buttons.
2. After each button is pressed, listen for movement or noise from the incline motor.
3. Press the **Incline Quick Level 5** button on the left side of the console.
4. Next, we will press the **Incline Quick Level -5** button.

Steps 3 - 4



- **Incline motor can be heard moving briefly, but reverts to the original position:**
  - We'll calibrate the incline using this guide - [Schwinn 490 Elliptical: Incline Calibration Procedure](#)
  - If the issue persists after recalibrating the incline, [order an Incline \(Lift\) Motor \[15333.K\]](#).
- **If there is no noise or movement from the incline motor:**
  - We'll check the input/output cable connections first, then the incline adjuster assembly if the issue continues.
  - Checking the handlebar cable is not needed for this scenario.
  - Skip to the [Check the console cable connection](#) steps to continue troubleshooting.

## Inspect the cable connection at the left upper handlebar

<i>Tools Required:</i>	<i>Estimated Time to Complete:</i>	<i>Service Manual Procedure:</i>
Phillips head screwdriver 6mm hex key/Allen wrench	5 minutes	<a href="#">Replace the Cables (Section 3)</a>

### Access the connection

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

1. The upper and lower handlebar connection is protected by a handlebar cover. Five tabs on the external cover snap into place on the interior cover to secure it in place.
2. On the **left upper handlebar**, gently compress the outside of the exterior cover to release the tabs. Remove the exterior cover and set it to the side.
3. Next, locate the two screws facing the main body of the machine - these are used to attach the interior cover. Use a Phillips head screwdriver to loosen and remove the screws, then set the interior cover aside.
4. Once the handlebar cover is removed, we can use a 6mm Allen wrench to loosen and remove the four screws connecting the upper and lower handlebar.
5. Slightly pull up on the upper handlebar to expose the cable connection for incline controls.

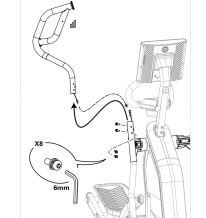
#### Steps 1 & 2



#### Step 3



#### Step 4

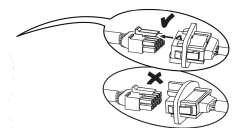
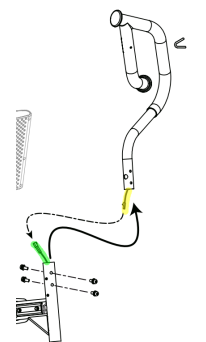


### Check the handlebar cable

1. There is one cable connection between the Base Hub (circuit board controlling resistance, speed, and incline) and the upper handlebars.
2. Let's unplug the cable so we can check the following items:

- **Damage** - Check for cut, crimped, or frayed wires, loose connectors, and missing/bent pins within the connectors. If a cable or connector is damaged, the replacement item depends on which cable is affected:
  - Cable from Upper Handlebar: [order a Left Upper Handlebar \[15333.F1\]](#).
  - Cable from Lower Handlebar: [order a Base Hub to Buttons Cable \[15333.F2\]](#).
- **Connector Orientation** - the color of the wires should match on both sides of the connection (e.g., red wire matches red wire).
- **Connection Tightness** - the cable connectors must be firmly pressed together to properly secure the connection. The connectors have a latching mechanism where a plastic tab on the male connector slides over a small ridge on the female connector.
- These latch components can also be used to confirm the connectors are secured in the correct orientation.

#### Step 1



2. Once the cable is reconnected, test if the issue persists. Be careful not to pinch the wire when reinstalling the handlebar [\[15333.G\]](#).
3. If the issue persists, [order a Left Upper Handlebar \[15333.J\]](#).

## Inspect the console and console cable connection

<i>Tools Required:</i>	<i>Estimated Time to Complete:</i>	<i>Service Manual Procedure:</i>
Phillips head screwdriver	10 minutes	<a href="#">Replace the Console</a>

### Access the connection

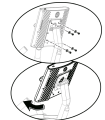
**Important:** Unplug the power cord from both the front of your machine and the electrical outlet before continuing

1. Lift to remove the console rear cover off of the console mast.
2. Using a Phillips head screwdriver, carefully remove the four screws that attach the console to the mast and set them to the side.
3. Carefully lift the console from the mast to expose the cable connection.

#### Step 1



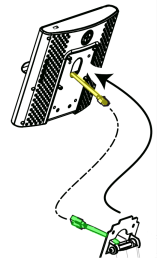
#### Step 2 & 3



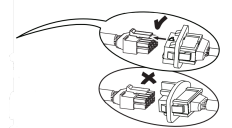
### Check the console and console cables

1. Inspect the console for any visible signs of damage, such as a cracked display or housing. [Order a Console](#) if damaged [\[15333.A\]](#).
2. If no damage is present, check the console cable connection. There is one cable connection between the console and console mast. **Be careful to not allow the cable to fall into the frame while troubleshooting.**
3. Unplug the cables and check the following items before reconnecting:
  - o **Damage** - Check for cut, crimped, or frayed wires, loose connectors, and missing/bent pins within the connectors. If a cable or connector is damaged, the replacement item depends on which cable is affected:
    - Console cable: [order a Console](#) [\[15333.B1\]](#).
    - Console Mast cable: [order a Mast Cable](#) [\[15333.B2\]](#).
  - o **Connector Orientation** - the color of the wires should match on both sides of the connection (e.g., red wire matches red wire).
  - o **Connection Tightness** - the cable connectors must be firmly pressed together to properly secure the connection. The connectors have a latching mechanism where a plastic tab on the male connector slides over a small ridge on the female connector.
  - o These latch components can also be used to confirm the connectors are secured in the correct orientation.
4. Once the cable is reconnected, install the console onto the mast and test if the issue persists. Be careful not to pinch the wire when reinstalling the console [\[15333.C\]](#). If the issue persists, check the next connection in the section below.

#### Steps 1 & 2



#### Step 2



## Inspect the cable connection at the bottom of the console mast

<i>Tools Required:</i>	<i>Estimated Time to Complete:</i>	<i>Service Manual Procedure:</i>
6mm hex key/Allen wrench	10 minutes	<a href="#">Replace the Console Mast</a>

### Access the connection

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

1. Starting with the console removed from the section above, use a 6mm Allen wrench to loosen and remove the four bolts attaching the handlebar assembly to the console mast.
2. There is one bolt on either side of the mast and two bolts on the user's side.
3. Slightly pull up on the console mast to expose the cable connection.

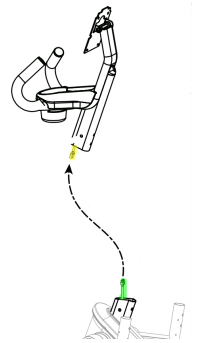


Steps 1 & 2

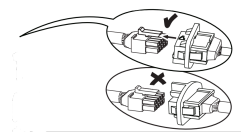
### Check the cables

1. There is one cable connection from the Base Hub (circuit board controlling resistance, speed, and incline) to the console mast. **Be careful to not allow the cable to fall into the frame while troubleshooting.**
2. Unplug the cables; check the following items before reconnecting:
  - o **Damage** - Check for cut, crimped, or frayed wires, loose connectors, and missing/bent pins within the connectors. If a cable or connector is damaged, the replacement item depends on which cable is affected:
    - Cable from Mast: [order a Mast Cable \[15333.D1\]](#).
    - Cable from Frame: [order a Mast to Base Hub Cable \[15333.D2\]](#).
  - o **Connector Orientation** - the color of the wires should match on both sides of the connection (e.g., red wire matches red wire).
  - o **Connection Tightness** - the cable connectors must be firmly pressed together to properly secure the connection. The connectors have a latching mechanism where a plastic tab on the male connector slides over a small ridge on the female connector.
  - o These latch components can also be used to confirm the connectors are secured in the correct orientation.
3. Once all cables are reconnected, reinstall the console mast and console, then test if the issue persists. Be careful not to pinch any wires when reinstalling the parts [\[15333.E\]](#).
4. If the issue persists, check the next component in the section below.

Steps 1 & 2



Step 2



## Inspect the incline adjuster assembly

<i>Tools Required:</i>	<i>Estimated Time to Complete:</i>	<i>Service Manual Procedure:</i>
Phillips head screwdriver 6mm hex key/Allen wrench 13mm, 19mm open-ended wrench	5 to 10 minutes	<a href="#">Replace the Incline (Lift) Motor</a>

### Access the incline motor

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

- Before we can remove the shroud to access the incline motor, we will need to disconnect the incline motor arm from the rail assembly:
  - To prevent risk of serious injury, do not place your hands or fingers below any pivoting parts on the rail assembly.
  - There are four nuts and bolts securing the incline motor arm to the rail assembly.
  - On each fastener, use a 13mm open-ended wrench to stabilize the nut and a 6mm Allen wrench to loosen and remove the bolt.
  - Once all bolts have been removed, the incline motor arm and rail assembly will separate, and the front of the rail assembly will rest on the floor.
  - Slide the incline motor arm from the rail assembly.
- Use a Phillips head screwdriver to loosen and remove the four screws (two on each side) attaching the rear shroud:
  - o One screw is located near the crank arm.
  - o One screw is located near the handlebar pivot joint.
- Gently pivot the rear shroud down along the incline motor arm. Slip the shroud between the incline motor arm and the rail assembly (where we removed the four bolts in Step 1), then set it to the side for reassembly later.
- The incline motor is located inside the rear shroud access we just created, mounted to the frame of your elliptical near the drive pulley.

#### Step 1



#### Step 2



#### Step 3



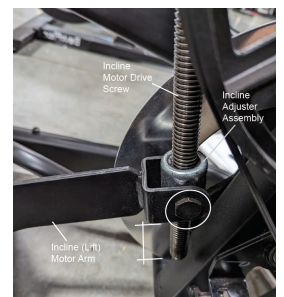
#### Step 4



### Check the incline adjuster assembly

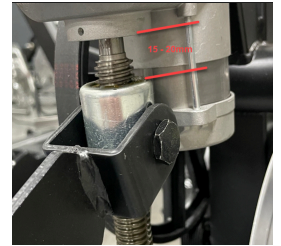
- The incline adjuster assembly is located at the bottom of the drive screw and connects the incline motor arm to the incline motor.
- If the incline adjuster assembly is not attached, the incline motor arm cannot move when the incline is adjusted. To reattach the incline adjuster assembly:
  - Use a 19mm open-ended wrench to loosen and remove the hex head bolts from the incline adjuster assembly.
  - Reinstall the incline adjuster assembly by rotating it onto the bottom of the drive screw.
  - Adjust the position of the incline adjuster assembly so that it is approximately 15mm to 20mm from the motor housing at the top of the drive screw - this is equal to about two to three exposed drive screw threads.
  - We will use a 19mm open-ended wrench again to tighten the hex head bolts and secure the incline adjuster assembly to the drive screw.

#### Steps 1 & 2



#### Step 2c

- e. Once secured, we will need to calibrate the incline motor ([Schwinn 490 Elliptical: Incline Calibration Procedure](#)) and test if the issue persists [[15333.H](#)].
3. If the incline motor or incline adjuster assembly are damaged, or the issue persists, [order an Incline \(Lift\) Motor](#) [[15333.I](#)].



## ***Need to order replacement parts?***

### 1 Parts Reference Table

<i>Part Description</i>	<i>Part SKU</i>
<b>Console</b>	<b>8027023</b>
<b>Incline Motor</b>	<b>8027294</b>
<b>Left Upper Handlebar</b>	<b>8025743</b>
<b>Mast Cable</b>	<b>8028068</b>
<b>Mast to Base Hub Cable</b>	<b>8027278</b>
<b>Base Hub to Buttons Cable</b>	<b>8027282</b>

### 2 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**