

# Schwinn 490 Elliptical: Speed or RPM Reading issues

ID: 15322.2

## Common issue descriptions:

- Speed is not displayed on console
- Inaccurate or inconsistent speed readings
- No speed reading shown
- Speed metrics aren't working

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

**Estimated time to complete:** Approximately 30 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. [Cable connections](#)
  - o [Connection behind the console](#)
  - o [Connection at the bottom of the console mast](#)
2. [Speed sensor assembly](#)

## Inspect the cable connection behind the console

<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

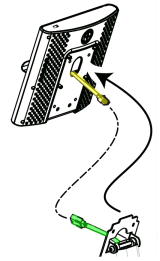


### Check the cables

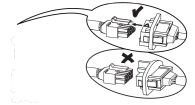
1. There is one cable connection between the console and console mast. **Be careful to not allow the cable to fall into the frame while troubleshooting.**
2. Unplug the cables and check the following items before reconnecting:
  - o **Damage** - Check for cut, crimped, or frayed wires, loose connectors, and missing/bent pins within the connectors. If a cable or connector is damaged, the replacement item depends on which cable is affected:

#### Steps 1 & 2

- Console cable: [order a Console \[15322.A1\]](#).
  - Console Mast cable: [order a Mast Cable \[15322.A2\]](#).
  - **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.
3. Once all cables are reconnected, install the console onto the mast and test if the issue persists. Be careful not to pinch any wires when reinstalling the console [\[15322.B\]](#).
4. If the issue persists, check the next connection in the section below.
- 



## 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

### Steps 1 & 2

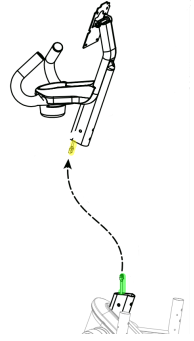
1. Starting with the console removed from the section above, use a 6mm Allen wrench to loosen and remove the four bolts attaching the handlebar assembly to the console mast.
2. There is one bolt on either side of the mast and two bolts on the user's side.
3. Slightly pull up on the console mast to expose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



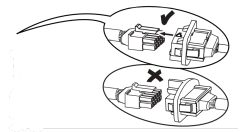
## Check the cables

1. There is one cable connection from the Base Hub 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:
  - **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 \[15322.C1\]](#).
    - Cable from Frame: [order a Mast to Hub Board Cable \[15322.C2\]](#).
  - **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.
3. Once all cables are reconnected, test if the issue persists. Be careful not to pinch any wires when reinstalling the console mast [\[15322.D\]](#).
4. If the issue persists, check the next component in the section below.

### Steps 1 & 2



### Step 2



## Inspect the speed sensor assembly

<i>Tools Required:</i>	<i>Estimated Time to Complete:</i>	<i>Service Manual Procedure:</i>
Phillips head screwdriver	10 - 15 minutes	<a href="#">Replace the Speed Sensor</a>

### Open the front access

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

1. There are eight tabs connecting the front lower shroud to the main shroud on either side of the machine.
2. Disengage the tabs by flexing the edges of the front shroud away from the main shrouds - a flathead screwdriver with a cloth covering the blade can be used for additional leverage.
3. Next, we will use a Phillips head screwdriver to remove the two screws on the main shrouds where the front shroud was just removed.
  - Just above the opening, one screw connects the left and right shrouds.
  - At the bottom of the opening, one screw secures the left main shroud to the frame of your machine.
4. With the shroud edges free, we can *gently* flex the left main shroud outward slightly. This will give us a better look at the speed sensor assembly mounted to the frame inside.

### Steps 1 & 2



### Step 3



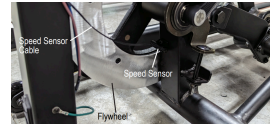
### Step 4



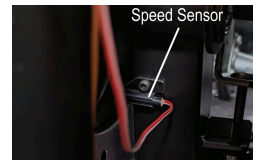
## Check the speed sensor

1. Check the speed sensor's positioning:
  - a. The speed sensor bracket should be stable with the hardware fully tightened.
  - b. The tip of the sensor should be pointed toward the magnet on the flywheel (small disc on the inside of the flywheel)
  - c. There should be a small gap between the sensor and magnet so they do not touch as the flywheel rotates.
2. If any adjustments are needed:
  - a. Use a Phillips head screwdriver to loosen the single screw on the speed sensor bracket.
  - b. Adjust the speed sensor to the proper position or angle.
  - c. Retighten the screw.
  - d. Test if the issue persists [\[15322.F\]](#).
3. Check the speed sensor for any visible damage. If the sensor is damaged, [order a Speed Sensor \[15322.G\]](#).
4. If the issue persists, check the next component below.

### Step 1



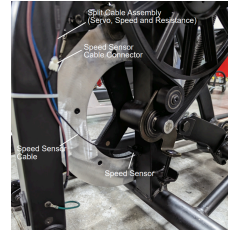
### Step 2



## Check the speed sensor cable

## Steps 1 & 2

1. Starting at the sensor, inspect the cable while following it to the connector.
  - a. Check for cut, crimped, or frayed wires, loose connectors, and missing/bent pins within the connectors.
  - b. At the end of the wire, check to confirm the speed sensor cable is securely connected to the Split Cable Assembly.
  - c. If unplugged, firmly press the connectors together, then test if the issue persists [\[15322.H\]](#).
2. If the cable is damaged or the issue persists after all troubleshooting has been attempted, [order a Speed Sensor \[15322.I\]](#).



## Need to order replacement parts?

### 1 Parts Reference Table

<i>Part Description</i>	<i>Part SKU</i>
<b>Console</b>	<b>8027023</b>
<b>Flywheel</b>	<b>8025782</b>
<b>Mast Cable</b>	<b>8028068</b>
<b>Mast to Base Hub Cable</b>	<b>8027278</b>
<b>Speed Sensor</b>	<b>8030902</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**