**Service Manual** 

8030090.041523.C





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# Important Safety Instructions and General Troubleshooting Information for the Schwinn™ 190/ 590U (Model Year 2021) Bikes

Service Procedures 8030093.041523.C

NOTICE: This document provides important safety instructions, adjustments, and general troubleshooting information for the maintenance of the Schwinn™ 190 / 590U (Model Year 2021) Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Nautilus, Inc., www.NautilusInc.com, 5415 Centerpoint Parkway, Groveport, OH 43125 U.S.A. - Customer Service: North America (800) 605-3369, csnls@nautilus.com | outside U.S. www.nautilusinternational.com | Printed in China | © 2022 Nautilus, Inc. | Schwinn, Schwinn Toolbox and the Schwinn logo are trademarks owned or licensed by Nautilus, Inc., registered or otherwise protected by common law in the United States and other nations. Google™ is a trademark of their respective owners. App Store is a service mark of Apple Inc. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc., and any use of such marks by Nautilus, Inc. is under license. | ORIGINAL DOCUMENT - ENGLISH VERSION ONLY

### Important Safety Instructions



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Before servicing or using this equipment, obey the following warnings:



Read and understand the Service Manual before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.

- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine replacement parts and hardware supplied by Nautilus. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not put the machine back in service until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

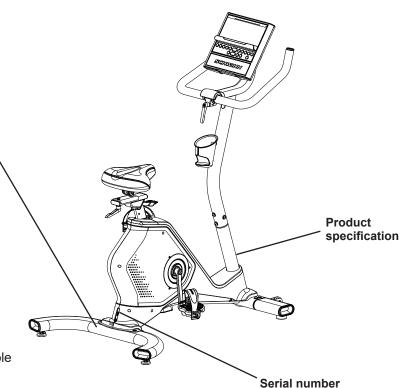
## ·SAVE THESE INSTRUCTIONS.

### Safety Warning Labels and Serial Numbers

### WARNING!

Read, understand and obey all warnings on this machine. Keep children away. Not intended for use by anyone under 14 years of age. Refer to owner's manual for additional warnings and safety information. Injury or death is possible if caution is not used while using this machine. The maximum user weight for this machine is 330 LBS (150 KG). The heart rate displayed is an approximation and should be used for reference only. For Consumer Use Only. Consult a physician prior to using any exercise equipment. Set up and operate the stationary exercise bicycle on a solid level surface.

(The Warning label on the machine is only available on the Schwinn™ 190 bike, in English and French Canadian only.)



This product complies with the European Radio Equipment Directive 2014/53/EU.

### **FCC Compliance**



Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The machine and power supply comply with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This machine and power supply have been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### **Specifications**

Maximum User Weight: 150 kg ( 330 lb )

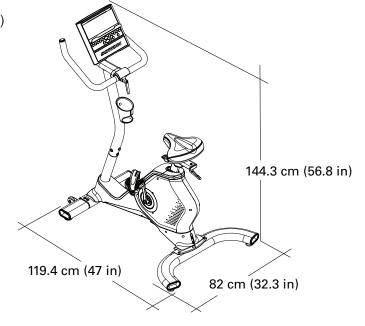
Total Surface Area (footprint) of equipment: 9790.8 cm<sup>2</sup> (1518.1 in<sup>2</sup>)

Machine Weight: 36.6 kg (80.7 lb)

Power Requirements (AC Adapter):

Input Voltage: 100 - 240V AC, 50/60Hz, 0.5A

Output Voltage: 12V DC, 3A

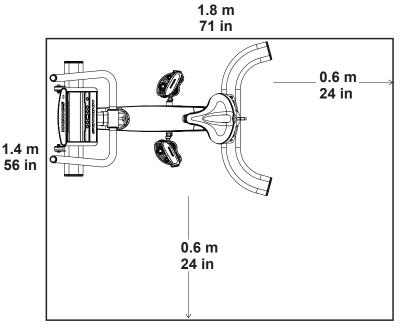




DO NOT dispose of this product as refuse. This product is to be recycled. For proper disposal of this product, please follow the prescribed methods at an approved waste center.

Select the area where you are going to set up and operate your machine. For safe operation, the location must be on a hard, level surface. We recommend an assembly area of 2.4 m x 2 m ( 95 in x 80 in ). Estimated time to assemble the machine is 30 - 60 minutes.

Allow a workout area of a minimum 1.8 m x 1.4 m (71 in x 56 in). Keep at least 0.6 m (24 in) along the side used to access the machine and to the rear of the machine clear.



### **Maintenance**

Read all maintenance instructions fully before you start any repair work. In some conditions, an assistant is necessary to do the necessary tasks.



Equipment must be regularly examined for damage and repairs. The owner is responsible to make sure that regular maintenance is done. Worn, damaged or loose components must be repaired or replaced immediately. Only manufacturer supplied components can be used to maintain and repair the equipment.

If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.

Disconnect all power to the machine before you service it.

Daily:

Before each use, examine the exercise machine for loose, broken, damaged, or worn parts. Do not use if found in this condition. Repair or replace all parts at the first sign of wear or damage. Check Pedals and tighten as needed. After each workout, use a damp cloth to wipe your machine and Console free of moisture.

Note: Avoid excessive moisture on the Console.

NOTICE: If necessary, only use a mild dish soap with a soft cloth to clean the Console. Do not clean with a petroleum based solvent, automotive cleaner, or any product that contains ammonia. Do not clean the Console in direct sunlight or at high temperatures. Be sure to keep the Console free of moisture.

Weekly:

Check pedals and crank arms and tighten as necessary.



Do not back, or reverse, pedal. Doing so may loosen the Pedals, which could result in damage to the machine and/or injury to the user. Never operate this machine with loose Pedals

Clean the machine to remove any dust, dirt, or grime from the surfaces. Check for smooth seat slider operation. If needed, apply a very thin coating of 100% silicone lubricant to ease operation.



Silicone lubricant is not intended for human consumption. Keep out of reach of children. Store in a safe place.

Note: Do not use petroleum based products.

Monthly or after 20 hours:

Make sure all bolts and screws are tight. Tighten as necessary.



When the machine is used in a Studio/Institutional environment, we recommend that the Pedals be replaced every year to maintain maximum user safety and performance. Only use replacement Pedals available from Nautilus. Other brands of Pedals may not be designed for this product, and can cause danger to users and bystanders, and will void the warranty.

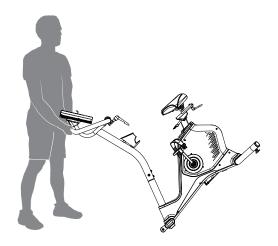
### Moving the Bike



The machine may be moved by one or more persons depending on their physical abilities and capacities. Make sure that you and others are all physically fit and able to move the machine safely.

- 1. Remove the power cord.
- 2. Carefully tilt the Handlebars toward you while pushing the front of the bike downward.
- 3. Push the machine into position.
- 4. Carefully lower the machine into position.

*NOTICE:* Be careful when you move the bike. Abrupt motions can affect the computer operation.



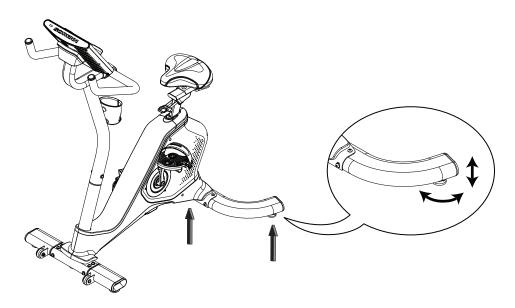
### Leveling the Bike

Levelers are found on each side of the Rear Stabilizer. Turn the adjustment nut to adjust the stabilizer foot.



Do not adjust the levelers to such a height that they detach or unscrew from the machine. Injury to you or damage to the machine can occur.

Make sure the bike is level and stable before you exercise.



### **Seat Adjustment**

Correct seat placement encourages exercise efficiency and comfort, while reducing the risk of injury.

- 1. With a Pedal in the forward position, center the ball of your foot over the center of it. Your leg should be bent slightly at the knee.
- 2. If your leg is too straight or your foot cannot touch the Pedal, move the seat down on the upright bike. If your leg is bent too much, move the seat up.

### ▲ Step off the bike before you adjust the seat.

3. Pull up the adjustment lever. Adjust the seat to the desired height. The adjustment lever will pop back into the locked position. Push down on the seat to ensure that the locking mechanism is fully engaged and the seat is secure.

# ▲ Do not set the Seat Post position higher than the stop mark (STOP) on the tube.

4. To move the seat closer to, or away from the console, loosen the Seat Slider Adjustment Handle. Slide the seat to the desired position and fully tighten the handle. Pull the handle down and turn so that it points rearward, then release.

**Note**: If the handle cannot turn due to contact with another part, pull the handle, turn and push it back in to reposition it. Continue turning as needed.

### **Foot Position / Pedal Strap Adjustment**

Foot pedals with straps provide secure footing to the exercise bike.

- 1. Put the ball of each foot on the Pedals.
- 2. Rotate the Pedals until one can be reached.
- 3. Fasten the strap over the shoe.
- 4. Repeat for the other foot.

Be sure toes and knees point directly forward to ensure maximum Pedal efficiency. Pedal straps can be left in position for subsequent workouts.



### Power-Up / Idle Mode / Welcome screen

The Console will enter Power-Up / Idle Mode if it is plugged into a power source, any button is pushed, or if it receives a signal from the RPM sensor as a result of pedaling the machine.

#### Auto Shut-Off (Sleep Mode)

If the Console does not receive any input in approximately 5 minutes, it will automatically shut off. The LCD display is off while in Sleep Mode.

Note: The Console does not have an On/Off switch.

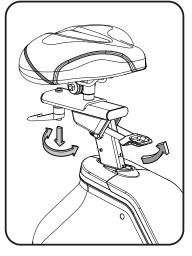
### **Demonstration Mode**

During Demonstration Mode, the Console will cycle through the Programs previews. The machine ships with Demonstration Mode inactive.

To activate the Demonstration Mode:

- With the machine activated, press and hold the Schwinn™ logo button for 3 seconds.
  - Note: The setting will take effect after the next time the machine goes into Sleep Mode.
- 2. Inspect the Console to be sure that Demo mode is active and running on the Console Display.

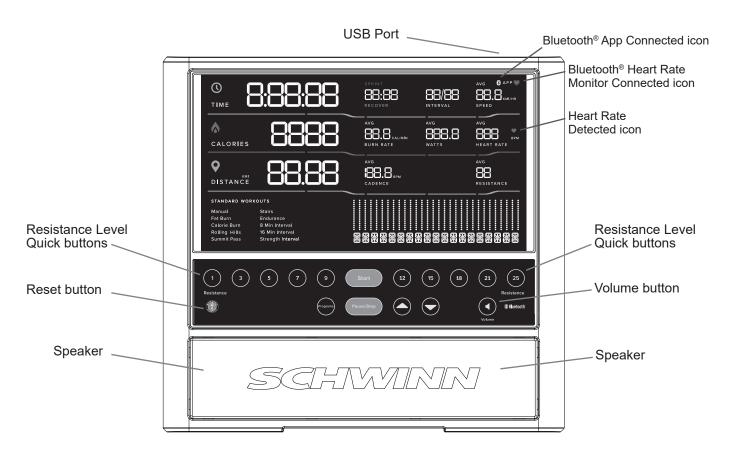
To exit Demonstration Mode, perform the above steps.



### Console

The Console provides important information about your workout and lets you control the resistance levels while you exercise. The Console features touch control buttons to navigate you through the exercise programs.

A Wifi connection is required to use your JRNY™ membership with your machine. If you do not have a Wifi connection available, contact your Schwinn™ Representative immediately for further assistance.



### **Keypad Functions**

Resistance Level Quick buttons- Shifts the resistance level to the setting quickly during a workout.

Volume button- Sets the sound level of the Console. Tap to cycle through the volume levels: Off, 1, 2 (default), 3. **It does not affect the output from your personal device.** 

Reset button (Schwinn™ logo)- for service technician use only. When pushed during power up, the button restores the Console settings to the factory default state. The Console will require updates to be applied in order to become fully functional. Workout data is not affected.

### Using your JRNY™ membership with your machine

If you have a JRNY™ membership\*, it can be accessed through your device when synced to the console of this Schwinn™ machine. With a JRNY™ membership, you receive guided workouts adapted to your capabilities, conveniently displayed on your device, and friendly virtual voice coaching designed to support you on your journey to long-term fitness success.

- 1. Download the app, named "JRNY™". The app is available on the App Store and Google Play™.
- 2. Be sure that the Bluetooth® and Location Settings are active on your device. Activate them if necessary.
- 3. Open the app near the machine, and follow the instructions to sync your device to the machine.

If the app will not sync to the machine, restart your device and the machine. Repeat Step 3.

### **Workout with Other Fitness Apps**

This fitness machine has integrated Bluetooth® connectivity which allows it to work with a number of fitness apps. For our latest list of supported apps, please visit: www.schwinnfitness.com

### **USB** Charging

If a USB Device is attached to the USB Port, the Port will attempt to charge the Device. Depending on the amperage of device, the power supplied from the USB Port may not be enough to operate the Device and charge it at the same time.

### Bluetooth® Heart Rate Enabled

Your fitness machine is equipped to be able to receive a signal from a Bluetooth® Heart Rate Sensing device. When connected, the Console will display the Bluetooth® Heart Rate Monitor Connected icon. Be sure to follow the described method to sync your device.



If you have a pacemaker or other implanted electronic device, consult your doctor before using a Bluetooth® strap or other Bluetooth® heart rate monitor.

### Bluetooth® Heart Rate Monitor

Your fitness machine is equipped to be able to receive a signal from a Bluetooth® Heart Rate (HR) Monitor. Follow the instructions provided with your Bluetooth® HR monitor.



If you have a pacemaker or other implanted electronic device, consult your doctor before using a Bluetooth® armband or other Bluetooth® heart rate monitor.

Note: Be sure to remove the protective cover (if provided) from the Heart Rate Sensor before use.

- 1. Put on your Bluetooth® Heart Rate monitor and activate it.
- 2. The Console will actively search for any monitors in the area, and will rapidly flash the Bluetooth® Heart Rate Monitor Connected icon.
- 3. When connected, the Bluetooth® Heart Rate Monitor Connected icon will flash with your pulse and your current heart rate value will be displayed on the Console. You are now ready to work out.

### **Modify Display of Workout Values**

To switch units between kilometers and miles before a workout, push the Programs button and hold for 3 seconds to enter the Console Setup Mode. The System Units prompt appears. Push an Increase/Decrease button to change the units (KM/ KG or MI/LB). With the desired unit of measurement displayed, push the Start button to save.

Note: The default system of measurement is MI/LB.

### Console Setup Mode – x90 Console (System Menu)

The Console Setup Mode allows you to set units of measurement to either Imperial or metric, adjust screen brightness, view maintenance statistics (such as Run Time hours and software version – for service technician use only), or reset the Console.

1. Push the Programs button and hold for 3 seconds while in the Power-Up Mode to go into the Console Setup Mode (System Menu).

Note: Push the Pause/Stop button to exit the System Menu and return to the Power-Up Mode screen.

2. The Console display shows the System Units prompt with the current setting. The default setting is Imperial English units. Push the Increase/Decrease buttons to change between Imperial (MI/LB) and metric (KM/KG).

Note: If the units change when there is data in User Statistics, the statistics convert to the new units.

- 3. Push the Programs button to set the selection and continue to the next menu option.
  - Note: To save the selection and exit the System Menu, push the Start button. To exit without saving, push the Pause/ Stop button.
- 4. The Console display shows the Screen Brightness prompt with the current setting. The levels of brightness are: 5 (100%), 4 (default, 95%), 3 (90%), 2 (85%), 1 (80%). The display shows the brightness of the selected level. Push the Resistance Increase/Decrease buttons to move to the desired level.
- 5. Push the Programs button to set the selection and continue to the next menu option.
- The Console display shows the Disconnect BT (Bluetooth®) prompt. The default option is NO. The YES option will
  disconnect all Bluetooth® devices. Push the Resistance Increase/Decrease buttons to change between options (YES/NO).
- 7. Push the Programs button to set the selection and continue to the next menu option.
- The Console display shows the Auto Connect HR (Heart Rate) prompt. The default option is YES. Push the Resistance Increase/Decrease buttons to change between options (YES/NO).
- Push the Programs button to set the selection and continue to the next menu option.
- 10. The Console display shows the Hardware Variant & Console Firmware Version.
- 11. Push the Programs button to continue to the next menu option.
- 12. The Console display shows the Base Serial Number.
- 13. Push the Programs button to continue to the next menu option.
- 14. The Console display shows the Hardware Variant (machine type).
- 15. Push the Programs button to set the selection and continue to the next menu option.
- 16. The Console display shows the Run Time hours (total number of hours of workout time).
- 17. Push the Programs button to continue to the next menu option.
- 18. The Console display shows the BLE Version.
- 19. Push the Programs button to continue to the next menu option.
- 20. The Console display shows the BTC Version.
- 21. Push the Programs button to continue to the next menu option.
- 22. The Console display shows the EX SNSR Version.
- 23. Push the Programs button to continue to the next menu option.
- 24. The Console display shows the Error Log prompt (for service technician use only). Push the Resistance Decrease button to move through the logged errors. At the end of the logged errors, the Console display shows the Clear Errors prompt (for service technician use only). To clear the errors, push the Start button.
- 25. Push the Programs button to continue to the next menu option.
- 26. The Console display shows the Reset Console prompt. The default option is NO. Push the Pause/Stop button to exit without starting Reset.

**Note:** The YES option will reset the System Units, Screen Brightness and Demo Mode to default settings. It does not reset the Run Time Hours.

Push the Resistance Increase/Decrease buttons to change between options (YES/NO).

Push the Start button to set the selection and exit the System Menu.

27. The Console will display the Power-Up Mode screen.

### **Console Service Mode – x90 Console (Manufacturing Test Menu)**

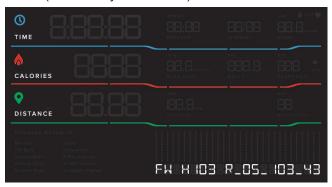
SERVICE MODE is a sub-menu from the CONSOLE SETUP MODE. Most of the options contained within the Service Mode (Manufacturing Test Menu) are for Service Technicians and should not need to be used by a user.

To access the Manufacturing Test Menu:

1. Push the Programs button and hold for 3 seconds while in the Power-Up Mode to go into the Console Setup Mode (System Menu).

Note: Push the Pause/Stop button to exit the System Menu and return to the Power-Up Mode screen.

- 2. The Console display shows the System Units prompt with the current setting. Tap the Programs button 4 times to advance through the System Menu.
- 3. The Console display shows the Hardware Variant & Console Firmware Version. The following sample screen shows the format (values may be different).



4. Push the Resistance Level Quick 25 button and hold for 3 seconds to go to the Manufacturing Test Menu. The Console display shows the Start Test Suite menu option. Push the Down arrow button to advance to the next Manufacturing Test Menu option.

### **Navigation:**

- Push the Up/Down arrow buttons to move through the Manufacturing Test Menu options.
- To run each test, push the Start button.
- Push Start to PASS each test or push Pause/Stop to FAIL it. This returns you to the Manufacturing Test Menu. For menu options that only display information, the choice of pass/fail will not affect machine operation.

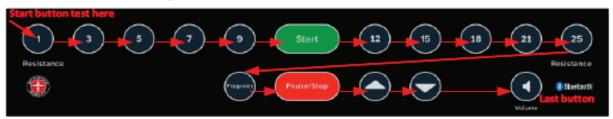
### Menu options:

- a. Start Test Suite Do not use; for use on the manufacturing production line ONLY. It is a chained series of tests similar to the tests listed below, but optimized to be run on the production line. Push the Down arrow button to advance to the next Manufacturing Test Menu option.
- b. Calibrate Resistance This option is done once at the factory. It only needs to be run if a machine part is replaced. The test requires operator control. Refer to the "Adjusting the Resistance Sensor (Calibration)" procedure.
- c. CONSOLE Version Displays the Hardware Variant (H) for 2-3 seconds, then the Console Firmware Version. Enter pass/fail to return to the menu. This information is also available in the System Menu.
- d. BTC Version Displays the Bluetooth® Audio module FW version (used for connecting a mobile device to the console speakers). Enter pass/fail to return to the menu. This information is also available in the System Menu.
- e. BLE Version Displays the Bluetooth® Low Energy module FW version (used for connecting to JRNY™/third party app and wireless heart rate). Enter pass/fail to return to the menu. This information is also available in the System Menu.
- f. EX SENSR Version Displays the EX Sensor board FW version. The EX Sensor is on a circuit board in the lower engine. It collects the resistance sensor position and the crank speed sensor data, and communicates sensor data to / from the Console for resistance setting and HWVariant & Base SN. The EX Sensor stores calibration for magnetic resistance. Enter pass/fail to return to the menu. This information is also available in the System Menu.
- g. Tach Displays the crank cadence (speed). Enter pass/fail to return to the menu.

- h. SNSR Status Displays information about the Resistance position sensor.
  - AGC range is 0 to 128; a value of 64 is perfect. Any value between 20 and 115 is normal. A value greater than 125 indicates a possible mechanical alignment/spacing issue with the magnet to the resistance sensor.
  - An MH value of 1 means there is mechanical misalignment between the magnet and the resistance sensor.
  - The MD value shows: 1 = magnet is present, 0 = magnet is missing (no magnet). Enter pass/fail to return to the menu.
- i. SNSR Control Manually drives the resistance servo and shows sensor position, but in smaller increments than the resistance level control during normal use. The Resistance Level Quick 12 (up) and 15 (down) buttons are enabled to use for fine adjustments. If the C (calibrated) and R (raw) values are the same and increase/decrease in unison, calibration has not been performed on the machine. Enter pass/fail to return to the menu.
- j. Resistance This test drives the resistance servo a small distance and reads the resistance position sensor to confirm the operation was successful. Automated pass/fail.
- k. LED Red Console LED Test; LED blinks during test. The LED is visible through the vent in the back of the console. Not used during normal operation. Enter pass/fail to return to the menu.
- I. GI Button This test is to confirm that the Golden Image button (Reset button) is recognized. Pushing the Start button displays the prompt "Press Factory Reset". User must then push the Schwinn™ logo button (Reset button) to test. Automated pass if GI button works.

Note: This test only checks the function of the button and will not cause a reset to the Console.

m. Button Matrix – Tests to confirm that the Console buttons are recognized (GI button is not included). User must press the Console buttons based on the test prompts. If the user presses any button other than the prompted button the test will Fail. Automated pass/fail.



- n. EX EEPROM Tests EEPROM on Base Hub PCBA. Automated pass/fail.
- o. BT Audio Tests Bluetooth® Classic audio module. The Console display shows prompt "PLAY BTC AUDIO". Operator must pair mobile device to the "Schwinn Speakers". Enter pass/fail to return to the menu.
- p. EX ISP Tests ISP communication with Base Hub PCBA. Automated pass/fail.
- q. LCD Pushing the Start button turns on all the segments on the Console display. Pushing Start again causes segments to go dark, and then begin to light up in sequence. Push the Down button to pause, Up button to resume the test. User must push Start to exit the test. Enter pass/fail to return to the menu.
- r. Heart Rate Tests BLE module with heart rate monitor. Pushing the Start button displays the prompt "WAITING FOR HR". Operator must pair the HR monitor.

**Note:** It is best to have the HR monitor powered on before pressing Start. In this case the test may go straight to displaying the value received from the HR monitor immediately.

Enter pass/fail to return to the menu.

An alternate way to test the BLE module without a heart rate monitor is to use the free BLE browser app "EFR CONNECT" from Silicon Labs, available on App Store and Google Play™. From the app, select Browser. You should find "SCH\_190U" or "SCH\_290R" in the list of found devices.

- s. NVRAM Tests NVRAM on Console board. Automated pass/fail.
- t. Backlight Runs through Console display brightness levels from 100% down to 0% up to 100% by increments of 10%. Automatic test. Enter pass/fail to return to the menu.
- u. Volume During test, press Volume button to cycle through low, medium, and high levels of volume. Enter pass/fail to return to the menu.
- v. Speaker Left Plays sound tone out of left speaker. Tone is different from Speaker Right tone. Enter pass/fail to return to the menu.

- w. Speaker Right Plays sound tone out of right speaker. Tone is different from Speaker Left tone. Enter pass/fail to return to the menu.
- x. Display WATTS Pushing the Start button displays the DISPLAY WATTS selection screen. The default is "YES" to display the WATTS field. The Up/Down buttons cycle through the options (YES/NO). Push the Start button to set the selection. The new selection will take effect after the next power up.
- y. Reset Run Hours Do not use when troubleshooting with a customer. The default option is NO. The Up/Down buttons cycle through the options (YES/NO).
  - Push the Pause/Stop button to exit without starting Reset.
- z. APP LCD Metrics not used. The default option is NO. Do not change this option.
- aa. Reset Console Push the Pause/Stop button to exit without starting Reset. Pushing the Start button will bring up a prompt to start the Reset.
  - Note: This option will reset the System Units, Screen Brightness and Demo Mode to default settings. It does not reset the Run Time hours.
- 5. To exit the Manufacturing Test Menu, the Console must be powered off. Disconnect the power to the machine.

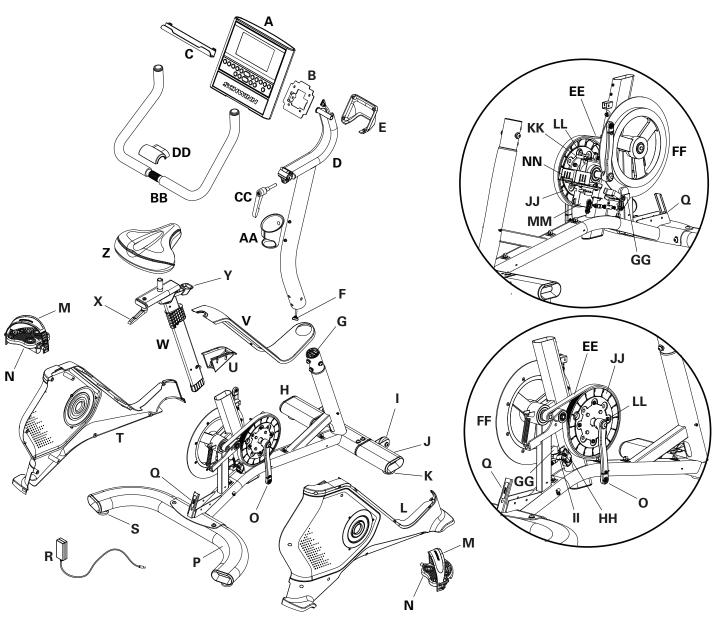
  Note: The Console does not have an On/Off switch.

## Troubleshooting

Condition/Problem	Things to Check	Solution		
No display/partial display/ unit will not turn on	Check electrical (wall) outlet	Make sure unit is plugged into a functioning wall outlet.		
	Check connection at front of unit	onnection should be secure and undamaged. Replace dapter or connection at unit if either are damaged.		
	Check data cable integrity	All wires in cable should be intact. If any are visibly pinched or cut, replace cable.		
	Check data cable connections/orientation	Be sure cables at base of mast and at back of console are connected securely and oriented properly. Small latch on connector should line up and snap into place.		
	Check console display for damage	Check for visual sign that console display is cracked or otherwise damaged. Replace Console if damaged.		
	Console Display	If Console only has partial display and all connections are fine, replace the Console.		
		If the above steps do not resolve the problem, contact Customer Service (if inside US/Canada) or your local distributor (if outside US/Canada).		
Console display shows "0 Base Hub Comm Error" error code	Check data cable integrity	All wires in cable should be intact. If any are visibly pinched cut, replace cable.		
	Check data cable connections/orientation	Be sure cables at base of mast and at back of console are connected securely and oriented properly. Small latch on connector should line up and snap into place.		
	Check console display for damage	Check for visual sign that console display is cracked or otherwise damaged. Replace Console if damaged.		
		If the above steps do not resolve the problem, contact Customer Service (if inside US/Canada) or your local distributor (if outside US/Canada).		
Console display shows "3 Stuck Button Error" error code	Check console keypad	Check for stuck buttons on the Console keypad. Replace Console if damaged.		
		If the above steps do not resolve the problem, contact Customer Service (if inside US/Canada) or your local distributor (if outside US/Canada).		
Console display shows "5 NVRAM Error" error code	Console	Indicates problem with flash memory on Console. Contact Customer Service (if inside US/Canada) or your local distributor (if outside US/Canada).		
Unit operates but Bluetooth® HR not displayed	HR monitor (not provided)	Follow the troubleshooting instructions provided with the device.		
	HR monitor batteries	If monitor has replaceable batteries, install new batteries.		
	Interference	Try moving unit away from sources of interference (TV, Microwave, etc).		
	Replace HR monitor	If interference is eliminated and HR does not function, replace HR monitor.		
	Replace Console	If HR still does not function, replace Console.		
No speed/RPM reading, Console displays "Please Pedal" error code	Check data cable integrity	All wires in cable should be intact. If any are cut or pinched, replace cable.		
	Check data cable connections/orientation	Be sure each cable is connected securely and oriented properly. Small latch on connector should line up and snap into place.		

Condition/Problem	Things to Check	Solution			
	Check magnet position (requires shroud removal)	Magnets should be in place on pulley.			
	Check Speed Sensor (requires shroud removal)	Speed sensor should be aligned with magnet and connected to data cable. Realign sensor if necessary. Replace if there is any damage to the sensor or the connecting wire.			
Resistance does not change (machine turns on and operates)	Check data cable integrity	All wires in cable should be intact. If any are visibly pinched or cut, replace cable.			
	Check data cable connections/orientation	Be sure cable is connected securely and oriented properly. Reseat all connections. Small latch on connector should line up and snap into place.			
	Check Servo Motor (requires shroud removal)	If magnets move, adjust until they are within the proper range. Replace Servo Motor if not functioning properly. Contact Customer Service (if inside US/Canada) or your local distributor (if outside US/Canada).			
	Check Console	Check for visual sign that Console is damaged. Replace Console if damaged.			
		If the above steps do not resolve the problem, contact Customer Service (if inside US/Canada) or your local distributor (if outside US/Canada) for further assistance.			
Console shuts off (enters sleep mode) while in use	Check electrical (wall) outlet	Make sure unit is plugged into a functioning wall outlet.			
	Check connection at front of unit	Connection should be secure and undamaged. Replace adapter or connection at unit if either are damaged.			
	Check data cable integrity	All wires in the cable should be intact. If any are cut or pinched, replace cable.			
	Check data cable connections/orientation	Be sure cable is connected securely and oriented properly. Small latch on connector should line up and snap into place.			
	Reset machine	Unplug unit from electrical outlet for 3 minutes. Reconnect to outlet.			
	Check magnet position (requires shroud removal)	Magnets should be in place on pulley.			
	Check Speed Sensor (requires shroud removal)	Speed sensor should be aligned with magnet and connected to data cable. Realign sensor if necessary. Replace if there is any damage to the sensor or the connecting wire.			
Unit rocks/does not sit level	Check leveler adjustment	Adjust levelers until bike is level.			
	Check surface under unit	Adjustment may not be able to compensate for extremely uneven surfaces. Move bike to level area.			
Pedals loose/unit difficult to pedal	Check pedal to crank arm connection	Pedal should be tightened securely to crank. Insure connection is not cross-threaded.			
Clicking sound when pedaling	Check pedal to crank arm connection	Remove pedals. Make sure there is no debris on threads, and reinstall the pedals.			
Seat post movement	Check locking pin	Be sure adjustment pin is locked into one of the seat post adjustment holes.			
	Check adjustment knob	Be sure knob is securely tightened.			
Console continuously cycles through program screens	Console is in demonstration mode	Press and hold the Schwinn™ logo button for 3 seconds. The setting will take effect after the next time the machine goes into Sleep Mode.			

## **Maintenance Parts Exploded View**



			1		•
Α	Console	0	Crank Arms	CC	Handlebar Clamp Handle
В	Console Mount Bracket	Р	Rear Stabilizer	DD	Handlebar Mount Cover
С	Media Tray	Q	Power Inlet	EE	Drive Belt
D	Console Mast	R	AC Adapter	FF	Flywheel
Е	Pivot Cover	S	Levelers	GG	Magnet Carriage
F	Data Cable, Upper	Т	Left Shroud	НН	Resistance Sensor
G	Insert, Lower Mast	U	Bolt Catch Shroud	II	Resistance Magnet
Н	Front Stabilizer, Left	٧	Top Shroud	JJ	Drive Pulley
I	Transport Wheels	W	Seat Post w/ Slider	KK	RPM (Speed) Sensor
J	Front Stabilizer, Right	Х	Seat Slider Adjustment Handle	LL	Speed Sensor Magnet (4)
K	Stabilizer Foot	Υ	Seat Adjustment Lever	MM	Servo Motor
L	Right Shroud	Z	Seat	NN	PCBA/Mount Assembly
М	Pedal Straps	AA	Water Bottle Holder		
N	Pedals	ВВ	Handlebar		
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### REPLACEMENT PROCEDURE SKILL LEVEL

Level I: Low - very little mechanical knowledge or exposure.

Level II : Intermediate - some experience with mechanical procedures Level III : Advanced - knowledgeable about mechanical procedures



Disconnect all power to the machine before you service it.

When disposing of old parts, obey the applicable local and provincial requirements.

For instructions to replace the following parts, please refer to the Assembly Manual for your bike:

- AC Adapter
- Handlebar
- Seat
- Seat Post
- Front Stabilizer
- Rear Stabilizer
- Water Bottle Holder



# Adjust the Resistance Sensor (Calibration) on the Schwinn™ 190/590U Bikes

Replacement Procedure Skill Level: III

Estimated Procedure Time: 20-30 minutes 8030095.010123.B

NOTICE: This document provides instructions to calibrate the Magnetic Resistance Sensor on the Schwinn™ 190 / 590U Upright Bikes. Sensor should only be calibrated under the supervision of a Nautilus Customer Care agent or other Nautilus Authorized technician.

This procedure should only be performed after replacement of the PCBA base hub, Resistance Sensor, or Resistance Magnet.

If you need assistance, please call Nautilus Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## SAVE THESE INSTRUCTIONS.

Tools Required (not included)

#2 Phillips screwdriver



**Calibration shim** 



Flathead screwdriver





NOTICE: Follow all directions exactly. Do not power cycle or restart console during procedure. Do not select any options other than those indicated in the below instructions or the console may no longer function properly.

Be sure to confirm that all cable connections are secure before performing the calibration.

Note: Your machine may not match the image. For reference only.

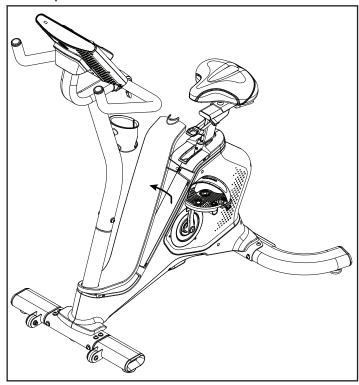
- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

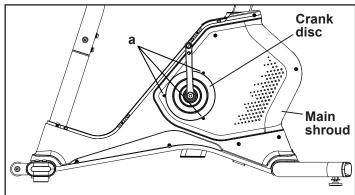


3. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

### Rotate top shroud



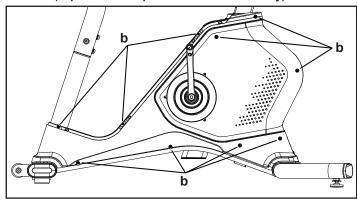
Left side (Top shroud and pedal not shown for clarity)



**4.** Using a #2 Phillips Screwdriver, remove the 10 screws (b) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.

**Note:** It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud.

Left side (Top shroud and pedal not shown for clarity)



Carefully angle and remove the Left Main Shroud. Set the parts safely aside for reassembly.



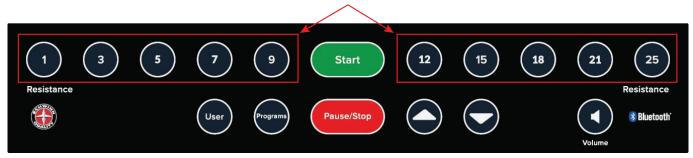
Left shroud removed (Crank disc not shown for clarity)



### 190/590U Calibration procedure:

1. Plug the AC Adapter into the machine and wall outlet.

### Resistance Level Quick Keys

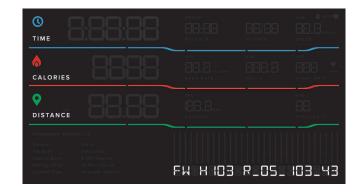


2. Push the Programs button and hold for 3 seconds while in the Power-Up Mode to go into the Console Setup Mode (System Menu).

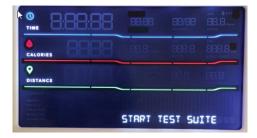
**Note:** To exit the System Menu and return to the Power-Up Mode screen, push the Pause/Stop button.

- 3. The Console display shows the System Units prompt with the current setting. Tap the Programs button 3 times to advance through the System Menu.
- **4.** The Console display shows the Hardware Variant & Console Firmware Version. The sample screen shows the format (values may be different).

Push the Resistance Level Quick 25 button and hold for 3 seconds to go to the Manufacturing Test Menu.



**5.** The Console display shows the Start Test Suite menu option. Push the Down arrow button to advance to the next Manufacturing Test Menu option.



**6.** The Console display shows the CAL\_RESISTANCE (Calibrate Resistance) option. Push the Start button.

**Note:** If the Pause/Stop button is pushed part way through the calibration (exit), the new calibration is not saved.

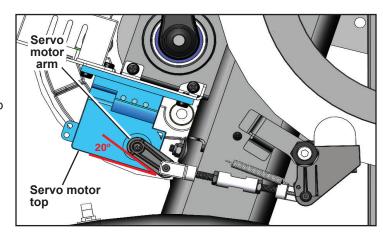


7. The Console display will show "SET MAX Cxxxx Rxxxx". The Cxxxx = Rxxxx (+- 5), where xxxx can be any value between 0 - 4095.

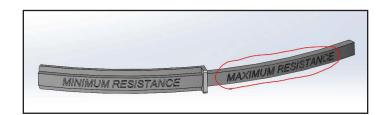


**8.** Make sure the Servo Motor arm is in the correct position as shown.

NOTICE: The angle between the Servo Motor arm and Servo top should be 20° (+3/-0). If the arm is not in the correct position. the calibration will not be successful and may damage the Servo linkage.

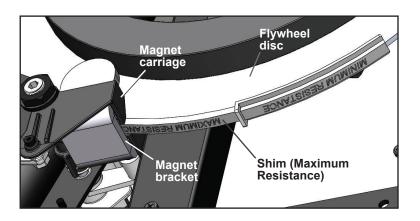


**9.** Locate the portion of the calibration shim with the text "MAXIMUM RESISTANCE".

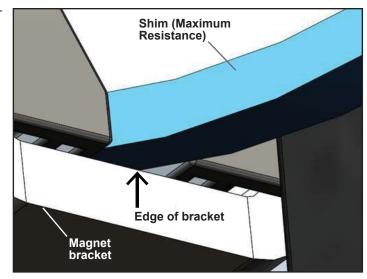


10. Insert the calibration shim between the Flywheel aluminum disc and the Magnet Carriage so that so that it is concentric (flush) to the Flywheel and the "MAXIMUM RESISTANCE" text is facing the magnet bracket. Rotate the Flywheel until this portion of the shim is in line with the magnet brake.

**Note:** It may be necessary to use the Console arrow keys to adjust the Magnet Carriage in order to insert the calibration shim.



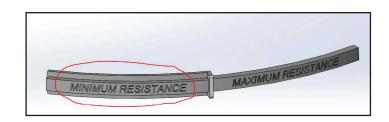
11. Use the Console arrow keys to adjust the magnet caliper to Max resistance position. To fine-tune the adjustment, use the Resistance Level Quick keys to adjust until the shim touches off on the edge of magnet bracket as shown. The Resistance Level Quick 12 button will move a small amount to higher resistance; the Resistance Level Quick key 15 button will move a small amount to lower resistance. Adjust until the ADC count stabilizes and no longer changes when the Resistance Level Quick keys are pressed.



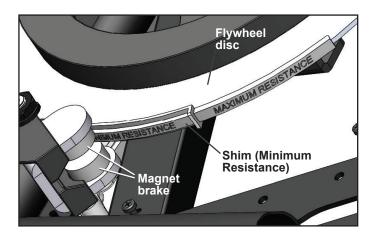
- **12.** Leaving the shim in place, set the Max resistance calibration point in the test app. Press the START button to mark the Max resistance position.
- 13. Remove the calibration shim (maximum resistance).

**Note:** It may be necessary to decrease the resistance slightly in order to remove the shim.

**14.** Locate the portion of the calibration shim with the text "MINIMUM RESISTANCE".



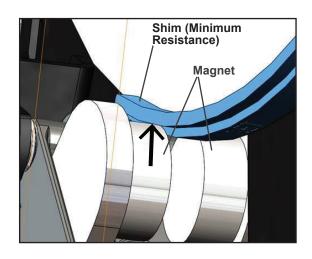
15. Use the Console arrow keys to adjust the magnet caliper position so that the calibration shim (minimum resistance) can slide into the magnet bracket. Insert the shim between the Flywheel aluminum disc and the Magnet Carriage so that so that it is concentric (flush) to the Flywheel and the "MINIMUM RESISTANCE" text is facing the magnet bracket. Rotate the Flywheel until this portion of the shim is in line with the magnet brake.



16. Use the Console arrow keys to adjust the magnet caliper position to Min resistance position. To fine-tune the adjustment, use the Resistance Level Quick keys. The Resistance Level Quick 12 button will move a small amount to higher resistance; the Resistance Level Quick key 15 button will move a small amount to lower resistance. Both the "Cxxxx" and "Rxxxxx" values will change, but they will not be the same value.



17. Shim will touch off on edge of magnet as shown. Press the Resistance Level Quick keys to decrease resistance until the ADC count stabilizes and no longer changes when the Resistance Level Quick keys are pressed. This indicates minimum resistance. The shim should be difficult to move, with the brake magnet pressing tightly against the shim.



**18.** Leaving the shim in place, set Minimum resistance calibration point in the test app. Press the START button to mark the Min resistance position. The display will change to "CNFRM C 0 AGC xx". The "MIN C 0" shows that the calibrated Minimum resistance position is set to 0.

Note: The AGC shows the magnetic sensor's AGC register value; normal AGC value will range between 40 – 100 (64 is perfectly centered). If AGC is less than 20, or greater than 120 the gap between the magnet and sensor should be adjusted until the AGC reported is within the range of 40 – 100.



19. Save the calibration in the test app. Press the START button to confirm and save the Max and Min resistance calibration values into the Sensor Hub electronics. The display will change to "SAVING CAL" for 2 seconds, then display "CAL\_RESISTANCE PASS". Calibration is complete. You may now power off the Console.

Note: If the Calibration process does not receive the expected final button press (PASS, FAIL), the process will wait for the button press. The final step of the Resistance Calibration procedure does not have an automatic timeout.



20. Remove the calibration shim (minimum resistance)

- **21.** Power on the Console. After the Power-Up/Welcome screen appears, use the Resistance Level Quick keys 25 and 1 to confirm that the magnet caliper moves properly between resistance level 1 and 25.
- 22. Power off the Console.
- **23**. Reinstall the Shrouds. Installation is the reverse procedure. Install the top screws first.

NOTICE: Be sure not to pinch or cut any cables.

Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

### 24. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Belt Tensioner (Idler Assembly) on the Schwinn™ 190 / 590U Bikes

Replacement Procedure Skill Level: III

Estimated Procedure Time: 20-30 minutes 8030098.081522.A

NOTICE: This document provides instructions for the replacement of the Belt Tensioner (Idler Assembly) on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



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Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

### ·SAVE THESE INSTRUCTIONS.

### Tools Required (not included)

#2 Phillips screwdriver



6 mm hex wrench



Small flathead screwdriver (and small piece of cloth)



Needlenose pliers



Safety goggles or other eye protection





### Disconnect all power to the machine before you service it.

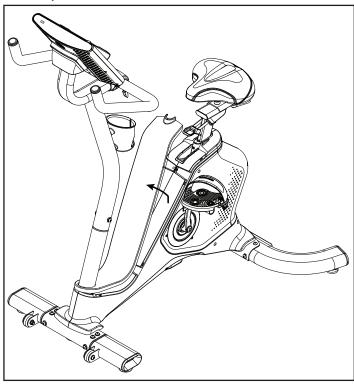
Note: Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

Note: It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

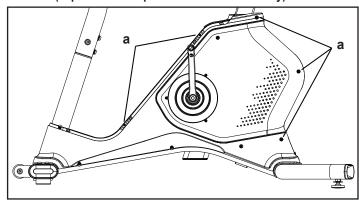


### Rotate top shroud



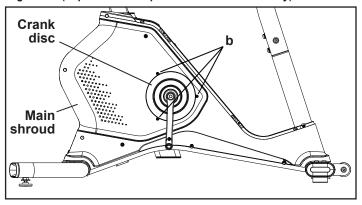
3. Using a #2 Phillips Screwdriver, remove the 5 screws (a) that attach the Left Main Shroud to the Right Main Shroud. Set them safely aside for reassembly.

Left side (Top shroud and pedal not shown for clarity)

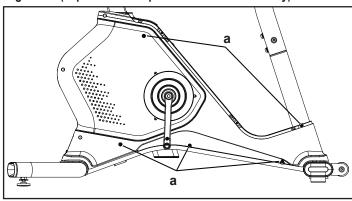


Using a #2 Phillips Screwdriver, remove 3 screws (b) that attach the Crank Disc to the Right Main Shroud. Set them safely aside for reassembly.

Right side (Top shroud and pedal not shown for clarity)



5. Using a #2 Phillips Screwdriver, remove the 5 screws (a) Right side (Top shroud and pedal not shown for clarity) that secure the Right Shroud. Remove the bottom screws first, and then the top screws.



Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the

Carefully angle and remove the Right Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.

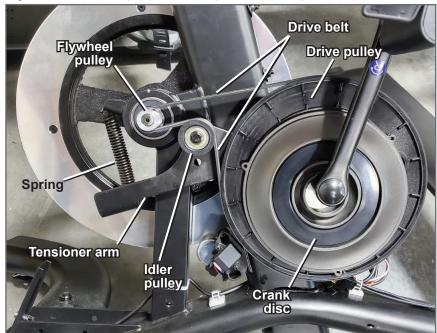


Left view of Bolt Catch Insert shown



**6.** Using needlenose pliers, release the spring on the Belt Tensioner. Remove the spring and set it safely aside for reassembly.

Right shroud removed (Left shroud and pedal not shown)



**Tensioner spring** 



7. Remove the Drive Belt after noting how to properly route the Belt. Slowly turn the Drive Pulley backward and carefully ease the Drive Belt off the Drive Pulley to the outside.



Be sure to keep fingers clear of all pinch hazards as you turn the Drive Pulley.

NOTICE: Be sure not to pinch or cut any cables.

Turn the Crank Arm to point up toward the front of the bike. Carefully angle the Crank Disc and pull it over the Crank Arm to allow access to the large hole in the Drive Pulley.

**8.** Rotate the Drive Pulley to align the large hole in the pulley with the pivot screw. Using a 6 mm hex wrench, remove the pivot screw and washers. Set them safely aside for reassembly.

Note: Support the Belt Tensioner so that it does not fall.

Tensioner pivot screw

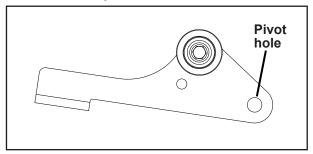


Schwinn™ 290 shown (Crank disc not shown for clarity)



**9.** Carefully pull the old Belt Tensioner off the post on the Main Frame. Slide it out from behind the Drive Pulley.

Tensioner assembly



**10.** Slide the new Belt Tensioner into position. Be sure the pivot hole in the Tensioner assembly engages the post.

**11.** Using the 6 mm hex wrench, install the new Belt Tensioner to the Frame with the hardware removed in step 8.

**12.** Put the Drive Belt in position on the Flywheel Pulley. Put the Drive Belt in position around the Idler Pulley. Be sure that the lower portion of the Drive Belt is above the Idler Pulley. Slowly turn the Drive Pulley backward and carefully ease the Drive Belt onto the Drive Pulley.

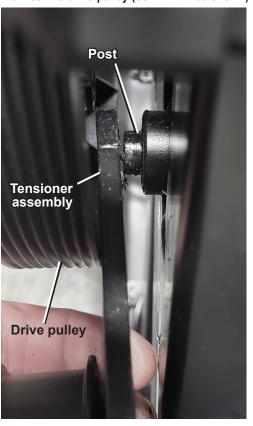


Be sure to keep fingers clear of all pinch hazards as you turn the Drive Pulley.

NOTICE: Be sure not to pinch or cut any cables.

- **13.** Make sure the Drive Belt is aligned on the Flywheel Pulley, Belt Tensioner and Drive Pulley.
- **14.** Using needlenose pliers, re-install the spring on the Belt Tensioner arm.

View behind drive pulley (Schwinn™ 290 shown)





**15.** The remainder of reassembly is the reverse procedure.

Install the top shroud screws first.

NOTICE: Be sure not to pinch or cut any cables.

Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

### 16. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Console on the Schwinn™ 190/590U and 290/590R Bikes

Replacement Procedure

Skill Level: II Estimated procedure time: 15-20 minutes 8030454.010123.A

NOTICE: This document provides instructions for the replacement of the Console on the Schwinn™ 190 / 590U Upright Bikes and 290 / 590R Recumbent Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



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Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

#2 Phillips screwdriver







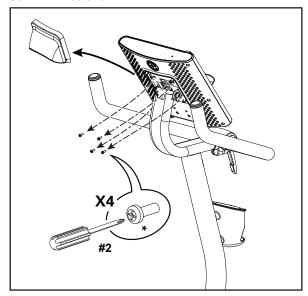
### Disconnect all power to the machine before you service it.

Note: Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Remove the Pivot Cover from the back of the Console. Remove the four screws that attach the Console to the Mast. Set the parts safely aside for reassembly

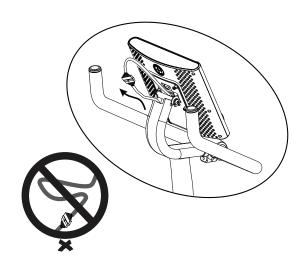
NOTICE: Do not cut or pinch the cables.

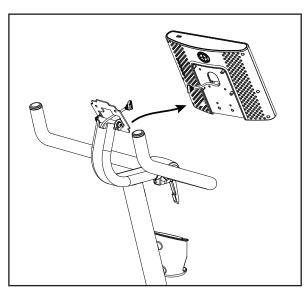
Schwinn<sup>™</sup> 190 shown



3. Disconnect the Data Cable from the back of the Console. Carefully lift the old Console off the Mast, and set it safely aside.

**Note:** Do not let the cable fall down inside the Mast. This step may require two people.

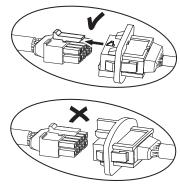


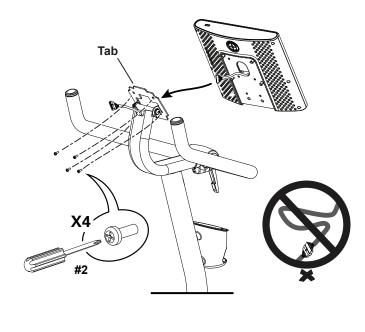


**4.** Tilt the new Console to install the wide tab at the top of the Console Mount Bracket. Route the Console cable through the bracket.

Attach the Console to the Console Mount Bracket before connecting the cables. Start lower screws first, then tighten all screws. Connect the Console cable to the Console Mast cable. Align the clips on the cable connectors and make sure the connectors lock. Push the extra wire down into the Console Mast.

NOTICE: Do not cut or pinch the cables.





Re-install the Pivot Cover.

NOTICE: Do not cut or pinch the cables.

### 6. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.

Carefully remove the protective plastic film from the display screen, keypad and top of the Console. Due to static electricity, "ghost" images may show on the screen but these will disappear after a few minutes.



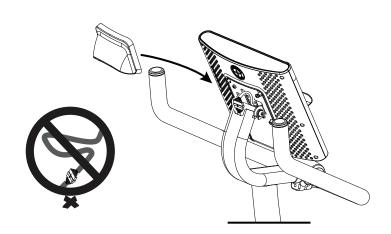
Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.

### Sync with Your JRNY™ Membership

If you have a JRNY™ membership, it can be accessed through your device when synced to the console of this Schwinn™ machine.

- 1. Power up the machine.
- 2. Be sure that the Bluetooth® and Location Settings are active on your device. Activate them if necessary.
- 3. Open the app near the machine, and follow the instructions to sync your device to the machine.

If the app will not sync to the machine, restart your device and the machine. Repeat Step 3.





# Replace the Console Mast on the Schwinn™ 190 / 590U Bikes

Replacement Procedure

Skill Level: II Estimated procedure time: 15-20 minutes 8030099.010123.B

NOTICE: This document provides instructions for the replacement of the Console Mast on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

#### Tools Required (not included)

#2 Phillips screwdriver



6mm hex wrench



13 mm open end wrench





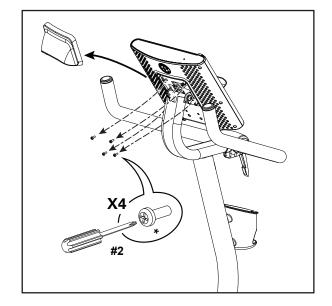


### Disconnect all power to the machine before you service it.

**Note:** Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Remove the Pivot Cover from the back of the Console. Remove the four screws that attach the Console to the Mast. Set the parts safely aside for reassembly.

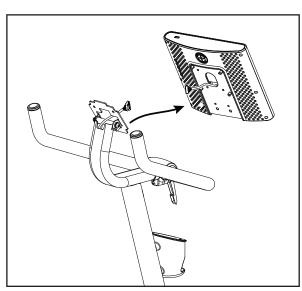
NOTICE: Do not cut or pinch the cables.



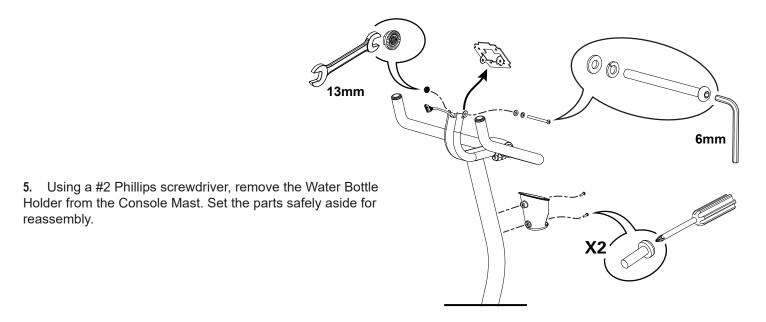
**3.** Disconnect the Data Cable from the back of the Console. Carefully lift the Console off the Mast, and set it safely aside for reassembly.

**Note:** Do not let the cable fall down inside the Mast. This step may require two people.





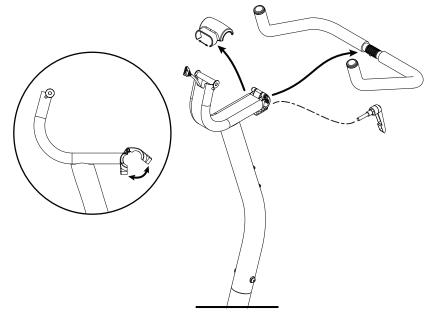
**4.** Using a 6mm hex wrench and 13 mm open end wrench, remove the Console Mount Bracket from the Console Mast. Set the parts safely aside for reassembly.



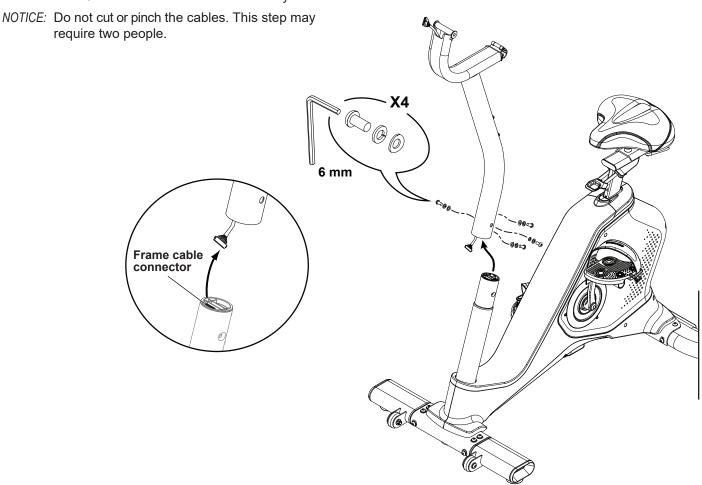
**6.** Remove the Handlebar Mount Cover. Remove the Handlebar Clamp Handle from the bracket.

Note: Support the Handlebar so that it does not fall.

Remove the Handlebar and set the parts safely aside for reassembly.

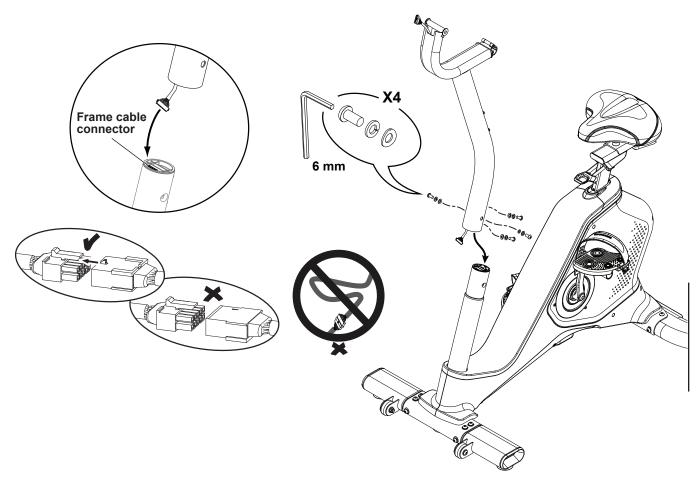


7. Using a 6mm hex wrench, remove the indicated hardware from the Console Mast. Slightly pull the Console Mast upward, and disconnect the cables. The Frame cable connector (indicated) is attached to the plastic insert in the mast mount. Leave the plastic insert and Frame cable connector in place. Set the old Console Mast and hardware safely aside.



**8.** Connect the new Mast Data Cable to the Data Cable from the Main Frame. The Frame cable connector (indicated) is attached to the plastic insert in the mast mount. Leave the plastic insert and Frame cable connector in place and carefully connect the Console Mast cable. Align the clips on the cable connectors and make sure the connectors lock.

*NOTICE:* Do not cut or pinch the cables. This step may require two people.



**9.** Using a 6 mm hex wrench, install the Console Mast to the Main Assembly. Align the curved washers so the surface is flush with the Console Mast tube.

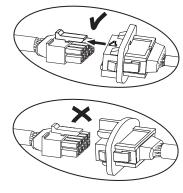
NOTICE: Make sure the Console Cable does not fall into the Console Mast. Do not cut or pinch the Console Cable.

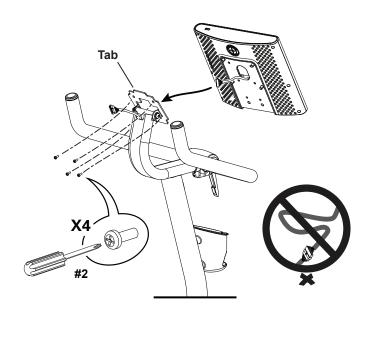
10. The remainder of reassembly is the reverse procedure.

11. Tilt the Console to install the wide tab at the top of the Console Mount Bracket. Route the Console cable through the bracket.

Attach the Console to the Console Mount Bracket before connecting the cables. Start lower screws first, then tighten all screws. Connect the Console cable to the Console Mast cable. Align the clips on the cable connectors and make sure the connectors lock. Push the extra wire down into the Console Mast.

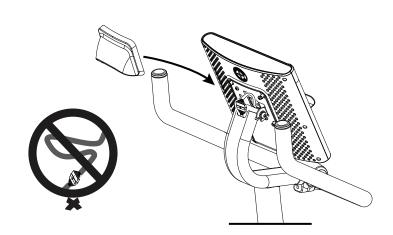
*NOTICE:* Do not cut or pinch the cables.





#### 12. Re-install the Pivot Cover.

NOTICE: Do not cut or pinch the cables.



#### 13. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



## Replace the Crank Arms on the Schwinn™ 190/590U and 290/590R Bikes

Replacement Procedure
Skill Level: II

Estimated Procedure Time: 20-30 minutes 8030100.010123.B

NOTICE: This document provides instructions for the replacement of the Crank Arms on the Schwinn™ 190 / 590U Upright Bikes and 290 / 590R Recumbent Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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#### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

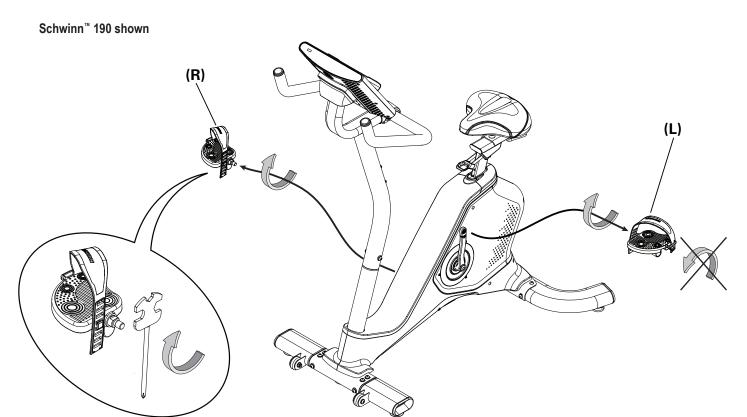
## ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)		
#2 Phillips screwdriver	14 mm Wrench and socket	
Flathead screwdriver	Crank puller	
	Adjustable wrench	
Pedal wrench or 15mm open end wrench		

Note: Your machine may not match the image. For reference only.

1. Loosen and remove the Pedals. Set them safely aside for reassembly.

Note: The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



**2.** Using a flathead screwdriver, remove the threaded Cap (A) from the Crank Arm (B) to expose the Hex Nut (C).







**3.** Using a 14 mm wrench and socket, remove the Hex Nut (C).



**4.** Thread the Crank Puller into the Crank Arm (B). When the Crank Puller is in the correct position, only 1-2 threads on the outer portion (CP2) of the Crank Puller should show.

**Note:** Be sure the end of the Bolt (CP1) of the Crank Puller is flush with the Nut (CP2) as shown, before use.

Crank puller nut and inner bolt





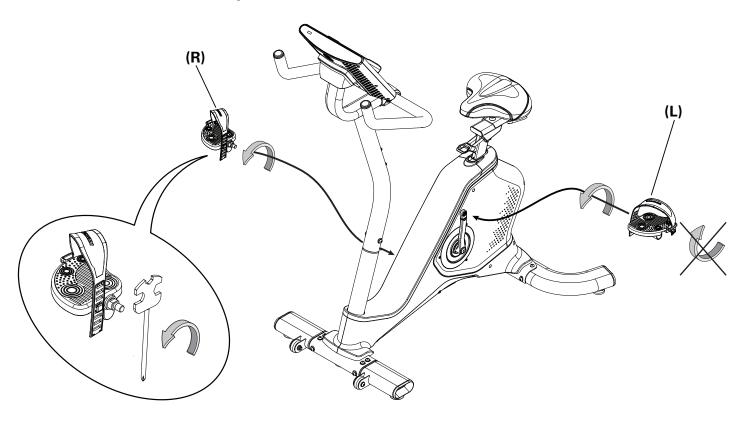
5. Using a wrench, turn the inner portion (CP3) of the Crank Puller clockwise. The Crank Arm (B) will slide off as it is tightened.



**6.** Installation is the reverse procedure. Installation does not require the use of the crank puller.

To reinstall the Pedals, carefully align the threads and hand tighten to prevent cross-threading. Then tighten fully with pedal wrench.

Note: The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



#### 7. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Data Cable (in the Console Mast) on the Schwinn™ 190 / 590U Bikes

Replacement Procedure

Skill Level: II Estimated procedure time: 15-20 minutes 8030101.010123.B

NOTICE: This document provides instructions for the replacement of the Data Cable (in the Console Mast) on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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#### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



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Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
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- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools	Red	uired	(not	includ	(bet

#2 Phillips screwdriver



6mm hex key



String/ziptie/strong tape



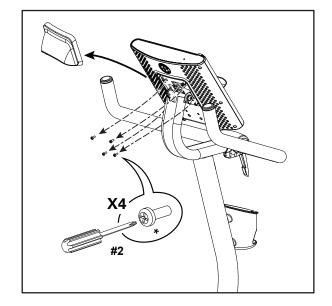


#### Disconnect all power to the machine before you service it.

Note: Your machine may not match the image. For reference only.

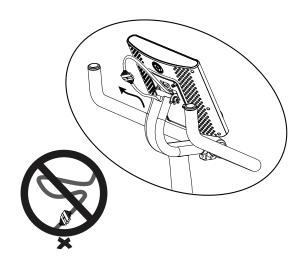
- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Remove the Pivot Cover from the back of the Console. Remove the four screws that attach the Console to the Mast. Set the parts safely aside for reassembly

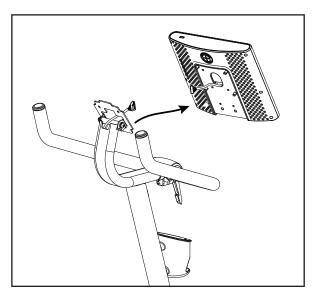
NOTICE: Do not cut or pinch the cables.



3. Disconnect the Data Cable from the back of the Console. Carefully lift the Console off the Mast, and set it safely aside for reassembly.

**Note:** Do not let the cable fall down inside the Mast. This step may require two people.

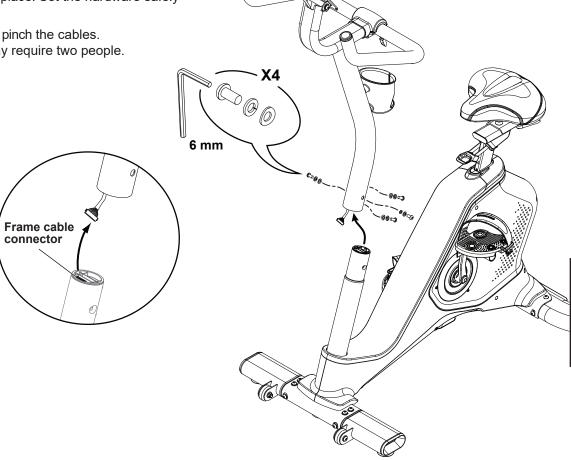




4. Using a 6mm hex wrench, remove the indicated hardware from the Console Mast. Slightly pull the Console Mast/ Handlebar assembly upward, and disconnect the cables. The Frame cable connector (indicated) is attached to the plastic insert in the mast mount. Leave the plastic insert and Frame cable connector in place. Set the hardware safely aside for reassembly.

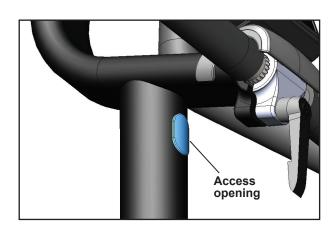
NOTICE: Do not cut or pinch the cables.

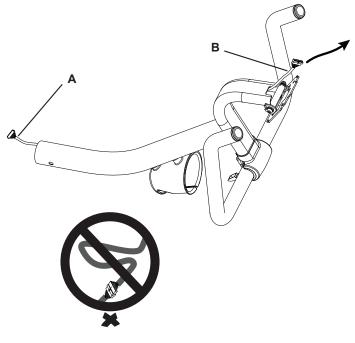
This step may require two people.



5. Using string (or ziptie, tape, etc.), fasten the end (A) of the old Data Cable at the base of the Mast to one end of the new Data Cable. Remove the rubber plug from the access opening at the Mast junction. Hold the other end (B) of the old Cable and carefully pull it out of the Mast in order to route the new Data Cable through the Mast.

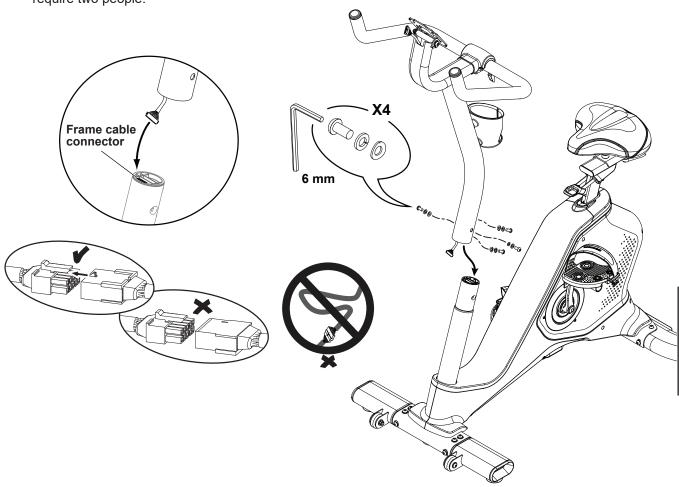
NOTICE: Do not cut or pinch the cable. Use the access opening at the Mast junction to assist in smoothly routing the cable.





- **6.** Re-install the rubber plug in the access opening in the Mast. Detach the old Data Cable and discard.
- 7. Connect the new Mast Data Cable to the Data Cable from the Main Frame. The Frame cable connector (indicated) is attached to the plastic insert in the mast mount. Leave the plastic insert and Frame cable connector in place and carefully connect the Console Mast cable. Align the clips on the cable connectors and make sure the connectors lock.

*NOTICE:* Do not cut or pinch the cables. This step may require two people.



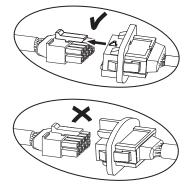
**8.** Using a 6mm hex wrench, install the Console Mast to the Main Assembly. Align the curved washers so the surface is flush with the Console Mast tube.

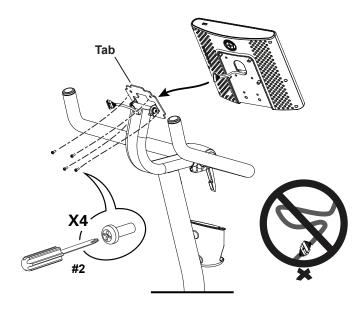
NOTICE: Make sure the Console Cable does not fall into the Console Mast. Do not cut or pinch the Console Cable.

**9.** Tilt the Console to install the wide tab at the top of the Console Mount Bracket. Route the Console cable through the bracket.

Attach the Console to the Console Mount Bracket before connecting the cables. Start lower screws first, then tighten all screws. Connect the Console cable to the Console Mast cable. Align the clips on the cable connectors and make sure the connectors lock. Push the extra wire down into the Console Mast.

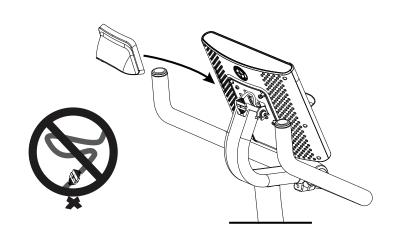
NOTICE: Do not cut or pinch the cables.





10. Re-install the Pivot Cover.

NOTICE: Do not cut or pinch the cables.



#### 11. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



#### Replace the Drive Belt on the Schwinn™ 190 / 590U Bikes

Replacement Procedure

Skill Level: II Estimated Procedure Time: 20-30 minutes 8030102.081522.A

NOTICE: This document provides instructions for the replacement of the Drive Belt on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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#### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
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- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

#### Tools Required (not included)

#2 Phillips screwdriver



Small flathead screwdriver (and small piece of cloth)



Needlenose pliers



Safety goggles or other eye protection





#### Disconnect all power to the machine before you service it.

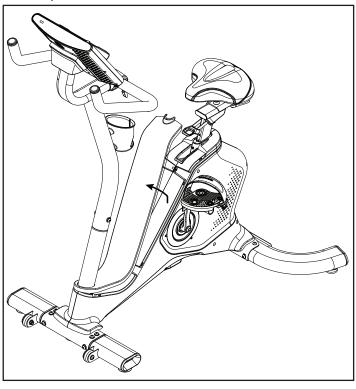
Note: Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

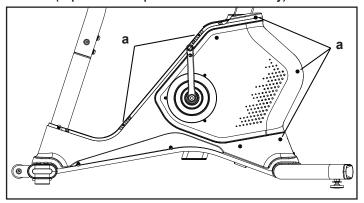


#### Rotate top shroud



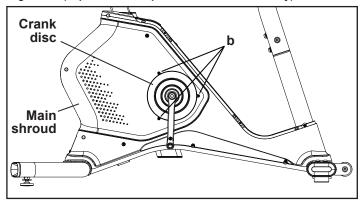
3. Using a #2 Phillips Screwdriver, remove the 5 screws (a) that attach the Left Main Shroud to the Right Main Shroud. Set them safely aside for reassembly.

Left side (Top shroud and pedal not shown for clarity)



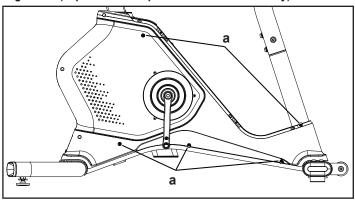
4. Using a #2 Phillips Screwdriver, remove 3 screws (b) that attach the Crank Disc to the Right Main Shroud. Set them safely aside for reassembly.

Right side (Top shroud and pedal not shown for clarity)



5. Using a #2 Phillips Screwdriver, remove the 5 screws (a that secure the Right Shroud. Remove the bottom screws first, and then the top screws.

5. Using a #2 Phillips Screwdriver, remove the 5 screws (a) Right side (Top shroud and pedal not shown for clarity)



Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Right Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.

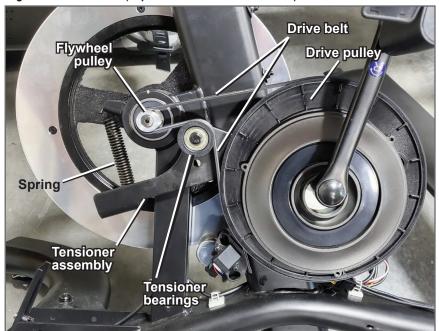


Left view of Bolt Catch Insert shown



**6.** Using the needlenose pliers, release the spring on the belt Tensioner.

Right shroud removed (Top and left shrouds not shown)



**Tensioner spring** 



7. Remove the old Drive Belt after noting how to properly route the new Belt. Slowly turn the Drive Pulley backward and carefully ease the Drive Belt off the Drive Pulley to the outside.



Be sure to keep fingers clear of all pinch hazards as you turn the Drive Pulley.

NOTICE: Be sure not to pinch or cut any cables.

8. Put the new Drive Belt in position on the Flywheel Pulley. Put the Drive Belt in position around the Tensioner Assembly. Be sure that the lower portion of the Drive Belt is above the Tensioner bearings on the Tensioner Assembly. Slowly turn the Drive Pulley backward and carefully ease the Drive Belt onto the Drive Pulley.

NOTICE: Be sure not to pinch or cut any cables.

**9.** Make sure the Drive Belt is aligned on the Flywheel Pulley, Belt Tensioner and Drive Pulley.

10. The remainder of reassembly is the reverse procedure.

Install the top shroud screws first.

NOTICE: Be sure not to pinch or cut any cables.

Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

#### 11. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Drive Pulley on the Schwinn™ 190 / 590U Bikes

Replacement Procedure
Skill Level: III
Estimated Procedure Time: 30 minutes

8030103.041523.C

NOTICE: This document provides instructions for the replacement of the Drive Pulley (Crank assembly) on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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#### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

#### Tools Required (not included)

13mm open end wrench

#2 Phillips screwdriver	Needlenose pliers	
Small flathead screwdriver	Snap ring pliers	
14 mm Socket and wrench	Dead blow hammer or rubber mallet and punch	
Crank puller	Safety goggles or other eye	protection



### Disconnect all power to the machine before you service it.

Note: Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Using a flathead screwdriver, remove the Crank Cover (a) from the Crank Arm to expose the Hex Nut (b).





3. Using a 14 mm wrench and socket, remove the Hex Nut (b).



**4.** Thread the Crank Puller into the Crank Arm. When the Crank Puller is in the correct position, only 1-2 threads on the outer portion (CP2) of the Crank Puller should show.

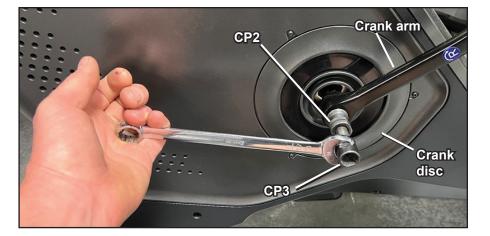
**Note:** Be sure the end of the Bolt (CP1) of the Crank Puller is flush with the Nut (CP2) as shown, before use.

Crank puller nut and inner bolt





- 5. Using a 13 mm wrench, turn the inner portion (CP3) of the Crank Puller clockwise. The Crank Arm will slide off as it is tightened.
- **6.** Repeat Steps 1-5 for the Crank Arm on the opposite side.

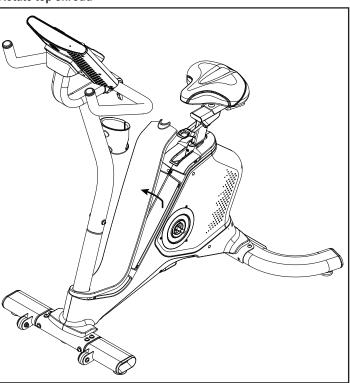


7. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.



#### Rotate top shroud

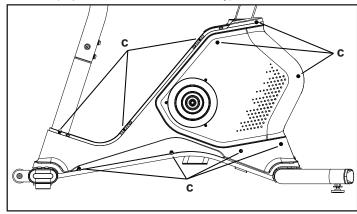


8. Using a #2 Phillips Screwdriver, remove the 10 screws (c) that secure the Left Main Shroud. Remove the bottom screws first, and then the top screws. Set them safely aside for reassembly.

**Note:** Orientation is based from a seated position on the bike.

Carefully remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.

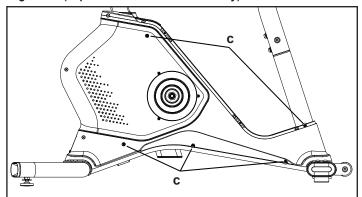
#### Left side (Top shroud not shown for clarity)



Left view of Bolt Catch Insert shown



Using a #2 Phillips Screwdriver, remove the 5 screws (c) Right side (Top shroud not shown for clarity) that secure the Right Shroud. Remove the bottom screws first, and then the top screws.



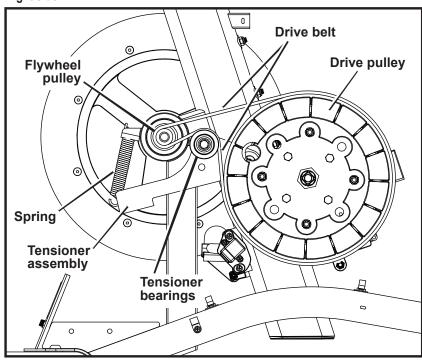
Carefully remove the Right Main Shroud. Set the parts safely aside for reassembly.

10. Using the needlenose pliers, release the spring on the belt Tensioner.

**Tensioner spring** 







11. Remove the Drive Belt after noting how to properly route the Belt. Slowly turn the Drive Pulley backward and carefully ease the Drive Belt off the Drive Pulley to the outside.



Be sure to keep fingers clear of all pinch hazards as you turn the Drive Pulley.

NOTICE: Be sure not to pinch or cut any cables.

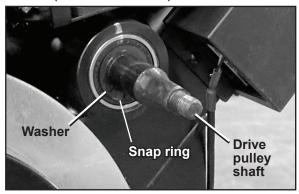
Drive pulley (Schwinn™ 290 shown)

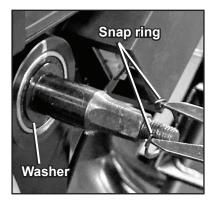


**12.** Using eye protection and snap ring pliers, remove the Snap Ring from the Pulley Shaft.

Remove the Washer from the Pulley Shaft.

Left side (Schwinn<sup>™</sup> 290 shown)





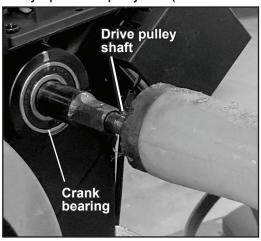


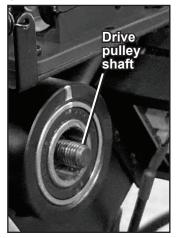
**13.** Using eye protection and a dead blow hammer (and punch, if needed), gently tap the Pulley Shaft until it works out of the Frame and releases the Drive Pulley.

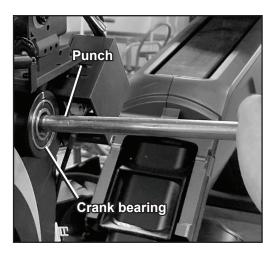
**Note:** Support the Drive Pulley so that it does not fall. The Crank Bearings will be left in the Frame after the axle is removed.

Set the old Drive Pulley and hardware safely aside .

Gently tap the drive pulley shaft (Left side of machine)



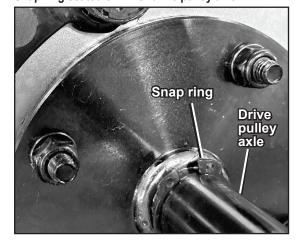




**14.** Push a new Snap Ring into position on the inner shaft (axle) of the new Drive Pulley assembly.

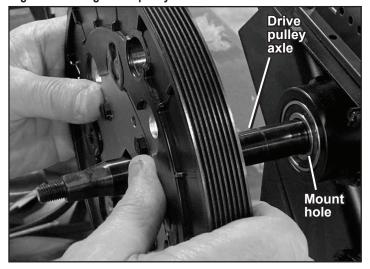
NOTICE: Make sure the Snap Ring is firmly seated on the Pulley Shaft assembly.

Snap ring seated on inner drive pulley axle

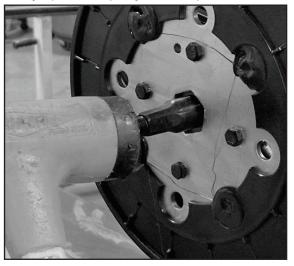


**15.** Installation is the reverse procedure. Align the axle of the new Drive Pulley assembly with the mount hole on the Right side of the Frame. Using eye protection and a dead blow hammer, gently tap the end of the Pulley Shaft to push it into position.

Right side — Align drive pulley axle with mount hole in frame



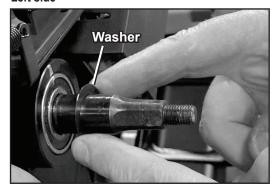
Gently tap the drive pulley shaft into position



**16.** On the Left side of the machine, slide the Washer onto the Pulley Shaft. Using snap ring pliers, push the new Snap Ring into position to secure the Washer on the Pulley Shaft assembly.

NOTICE: Make sure the Snap Ring is firmly seated on the Pulley Shaft assembly.

Left side





17. Put the Drive Belt in position on the Flywheel Pulley. Put the Drive Belt in position around the Tensioner Assembly. Be sure that the lower portion of the Drive Belt is above the Tensioner bearings on the Tensioner Assembly. Slowly turn the Drive Pulley backward and carefully ease the Drive Belt onto the Drive Pulley.



Be sure to keep fingers clear of all pinch hazards as you turn the Drive Pulley.

NOTICE: Be sure not to pinch or cut any cables.

**18.** Make sure the Drive Belt is aligned on the Flywheel Pulley, Belt Tensioner and Drive Pulley.

**Note:** Before fully attaching the Shrouds, verify that the RPM Sensor and Speed Sensor Magnets on the Drive Pulley do not touch.

**19.** The remainder of reassembly is the reverse of Steps 1 - 9. Install the top shroud screws first.

NOTICE: Be sure not to pinch or cut any cables.

Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

Installation of the Crank Arm does not require the use of the crank puller.

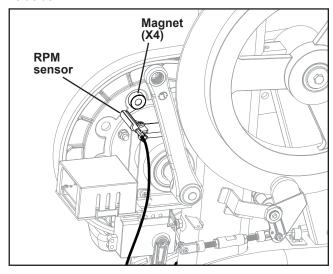
#### 20. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.

#### Left side





### Replace the Engine Cables on the Schwinn™ 190 / 590U Bikes

Replacement Procedure Skill Level: III

Estimated Procedure Time: 20-30 minutes 8030104.010123.B

NOTICE: This document provides instructions for the replacement of the Engine Cables—Lower Data Cable (hub board to Console Mast), Sensors/Servo Cable assembly (wiring harness), DC Power Cable—on the Schwinn™ 190 / 590U Upright Bikes. The Lower Data Cable is in the Main Mast Cables service kit.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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#### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

#2 Phillips screwdriver



6 mm hex wrench



Small flathead screwdriver (and small piece of cloth)



Needllenose pliers



15 mm open end wrench or pedal wrench 10 mm open end wrench or adjustable wrench



Utility knife or scissors **Zipties** 





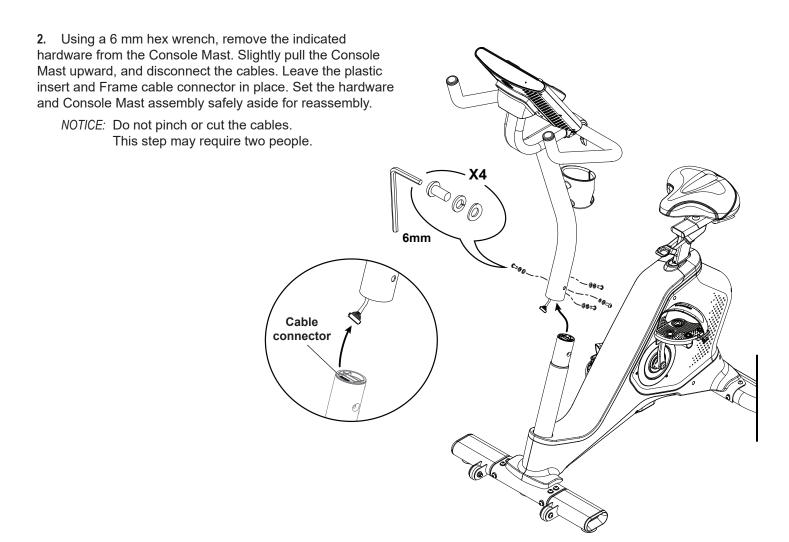
#### Disconnect all power to the machine before you service it.

Note: Your machine may not match the image. For reference only.

1. Unplug the AC Adapter from the wall outlet and machine.

If you are replacing the Lower Data Cable (Console Cable), continue to step 2.

If you are not replacing the Lower Data Cable, go to step 3.

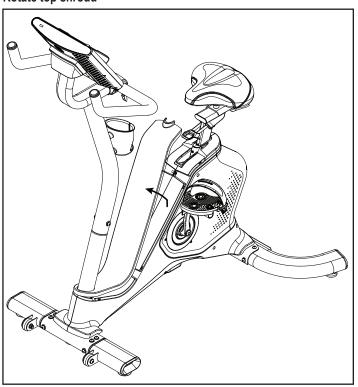


3. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

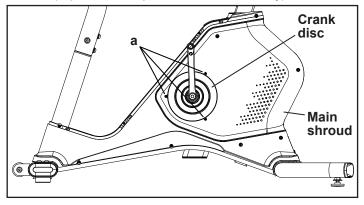


#### Rotate top shroud



**4.** Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

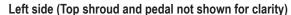
Left side (Top shroud and pedal not shown for clarity)

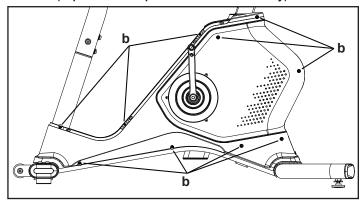


**5.** Using a #2 Phillips Screwdriver, remove the 10 screws (b) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.

Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.







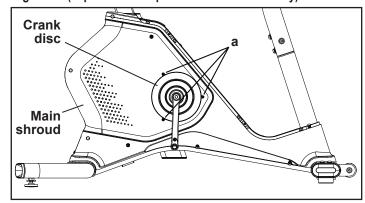


If you are replacing the Servo/Sensors cable assembly (wiring harness), continue to step 6.

If you are not replacing the Servo/Sensors cable assembly (wiring harness), go to step 8.

6. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Right Main Shroud. Set them safely aside for reassembly.

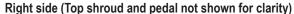
Right side (Top shroud and pedal not shown for clarity)

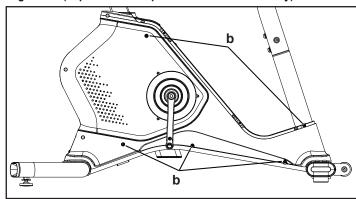


7. Using a #2 Phillips Screwdriver, remove the 5 screws (b) that secure the Right Shroud. Remove the bottom screws first, and then the top screws.

Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike

Carefully angle and remove the Right Main Shroud. Set the parts safely aside for reassembly.



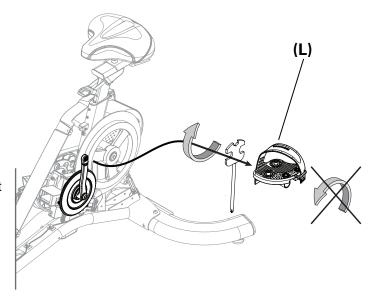


**Note:** It may be easier to get access to the cables and connectors if the Crank Ring Cover (Crank Disc) is removed.

#### To remove the Crank Disc:

**8.** Using a pedal wrench or 15mm open end wrench, loosen and remove the Left Pedal. Set it safely aside for reassembly.

Note: The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



**9.** Turn the Crank Arm to point up toward the front of the bike. Carefully angle the Crank Disc and slide it over the Crank Arm. Set it safely aside.



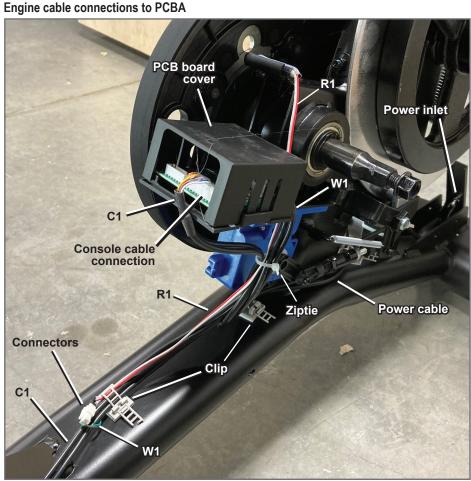
10. Observe the cable routing on your machine. Release the clips that attach the Lower Data Cable (Console Cable, C1), Sensors/ Servo Cable (W1), RPM Sensor Cable (R1) and Power Cable to the Frame.

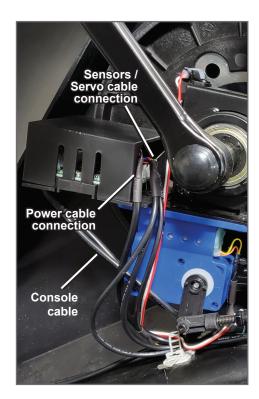
NOTICE: It may be necessary to remove a ziptie from the cables. Do not pinch or cut the cables.

11. Slightly press the tabs on the PCB board cover and remove the cover. Note the cable connections to the PCBA on your machine.

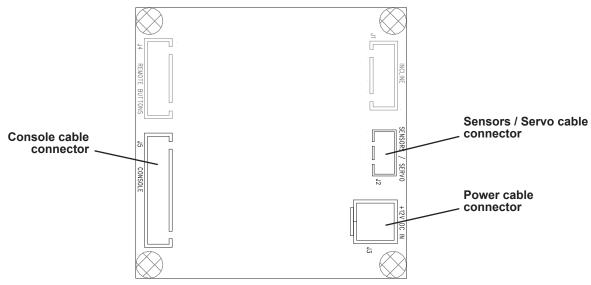
#### Cable clip







#### **PCBA** connectors



- NOTICE: The components on the PCBA are sensitive to electrostatic discharge (ESD). To help reduce the risk of ESD while handling the PCBA:
  - 1) Before touching the PCBA, discharge yourself of built-up static charge by simply touching the metal frame of the bike.
  - 2) Handle the PCBA from the edges.
- **12.** Using needlenose pliers, carefully peel the glue away from the cable connectors on the cable(s) that is being replaced.

If you are replacing the Lower Data Cable (Console Cable), continue to step 13.

If you are replacing the Sensors/Servo Cable (wiring harness), go to step 20.

If you are replacing the Power Cable, go to step 26.

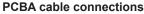
#### To replace the Console Cable:

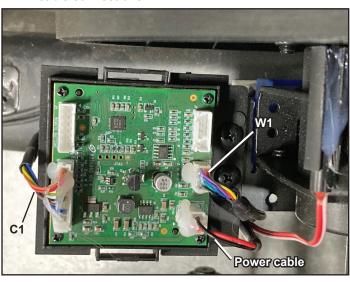
- **13.** Carefully disconnect the old Console Cable (C1) from the PCBA.
- **14.** Using a ziptie (or string, tape, etc.), attach the free end of the old Console Cable (C1) to the new Console Cable connector (with clips).

**15.** Using needlenose pliers, remove the plastic insert from the Console Mast mount. Carefully pull the old Console Cable (C1) out of the Console Mast mount in order to route the new Data Cable through the Mast mount.

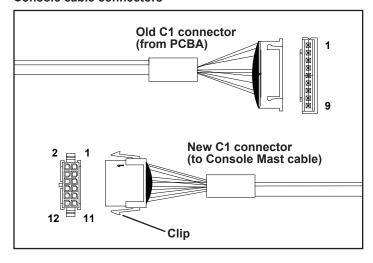
NOTICE: Do not pinch or cut the cable.

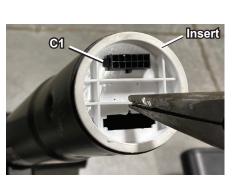
16. Detach the old Console Cable and discard.





#### Console cable connectors







17. Press the clips on the new Console Cable connector and align the tab on the connector with the notch in the smaller hole in the new plastic insert. Push the connector through the hole. Be sure the clips lcck the connector in position.

NOTICE: Do not pinch or cut the cable.

**18.** Press the plastic insert into position in the Console Mast mount.

NOTICE: Do not pinch or cut the cable.

**19.** Carefully connect the Console Cable (C1) to the PCBA.

NOTICE: Do not pinch or cut the cables. Be sure the cable connections for the PCBA are correct.

Replace ziptie on the cables and secure the cables in the cable clips to prevent interference from moving parts.

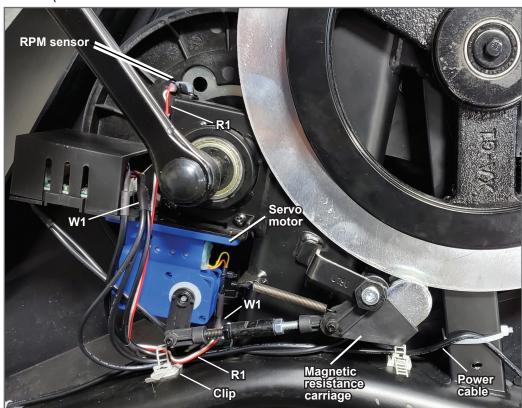
If you are replacing the Sensors/Servo Cable (wiring harness), continue to step 20.

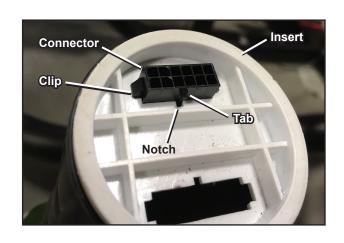
If you are replacing the Power Cable, go to step 26. Otherwise, go to step 31.

#### To replace the Sensors/Servo Cable assembly:

**20.** Observe the routing of the individual cables in the Sensors/Servo Cable assembly (wiring harness) to the Resistance Sensor, the RPM Sensor cable and the Servo Motor.

#### Left side (





Right side



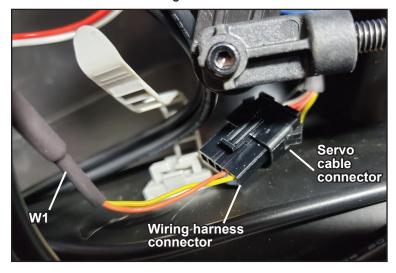


Make sure that power to the machine is disconnected before beginning this step.

**21.** Carefully disconnect the Servo Motor cable from the old wiring harness (W1).

NOTICE: Do not pinch or cut the cable.

#### Servo motor cable and wiring harness connectors

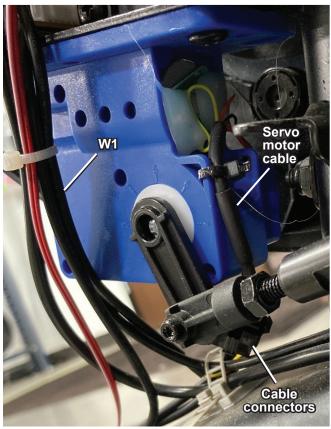


**22.** Using needlenose pliers, carefully peel the glue away from the cable connector on the Resistance Sensor. Carefully disconnect the old wiring harness (W1) from the Resistance Sensor.

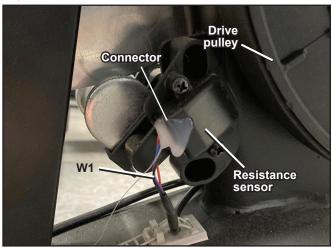
**23.** Carefully disconnect the RPM Sensor Cable (R1) from the old wiring harness (W1).

NOTICE: Do not pinch or cut the cables.

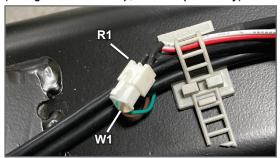
Servo motor cable (disregard ziptie, removed previously)



Right side—Resistance sensor connection



Wiring harness connection to RPM sensor cable (disregard the cable clip, released previously)

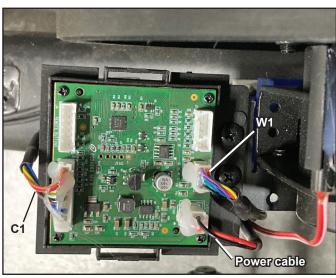


- **24**. Carefully disconnect the old Sensors/Servo Cable (W1) from the PCBA.
- **25.** Installation of the new Sensors/Servo Cable assembly is the reverse procedure.

NOTICE: Do not pinch or cut the cables. Be sure the routing for the new cables and other wiring is correct to prevent interference from moving parts.

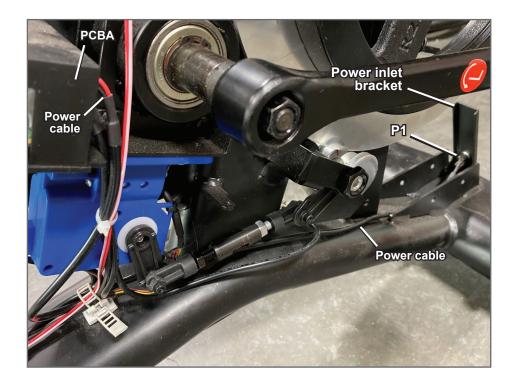
If you are replacing the Power Cable, continue to step 26. Otherwise, go to step 31.

#### **PCBA** cable connections

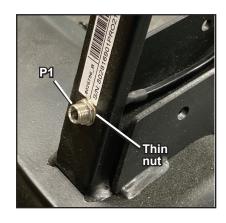


#### To replace the Power Cable assembly:

**26.** Observe the routing of the Power Cable assembly from the Power Inlet bracket to the PCBA.



27. Using a 10 mm open end wrench or adjustable wrench, loosen and remove the thin nut that holds the Power Cable connector (P1) in the Power Inlet bracket. Set it safely aside.



- 28. Pull the Power Cable plug (P1) out of the hole from the inside of the bracket.
- 29. Carefully disconnect the old Power Cable from the PCBA. Discard the old Power Cable.
- 30. Installation of the new Power Cable is the reverse procedure.

NOTICE: Do not pinch or cut the cables. Be sure the routing for the new cable and other wiring is correct to prevent interference from moving parts.



- 31. Re-install the PCB board cover.
- 32. Re-install the Crank Disc (if removed) and the Shrouds.

To install the Shrouds, put the Left Shroud in position first to align the screws for the Right Shroud. Install the top screws first.

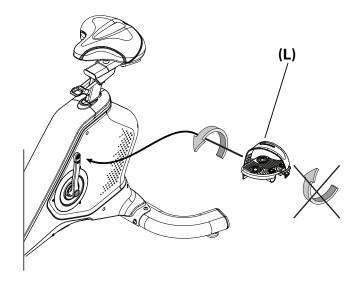
Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

33. Attach the Left Pedal (if removed). Start the Pedal by hand, and then fully tighten with the Pedal Wrench. The Pedals must be fully tightened.



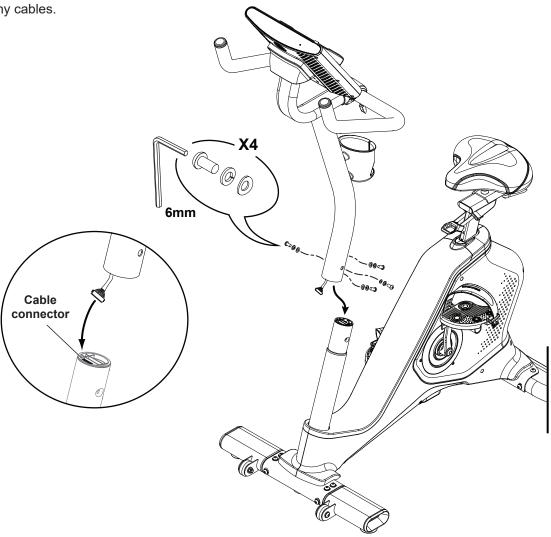
If the threads strip due to improper installation, then the Pedals can disengage from the bike and/or break while under usage, which can result in serious injury to the user.

Note: The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



## 34. Re-install the Console Mast assembly (if removed).

NOTICE: This step may require two people. Leave the plastic insert and Frame cable connector in place and carefully connect the Console Mast cable. Align the clips on the cable connectors and make sure the connectors lock. Be sure not to pinch or cut any cables.



## 35. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Flywheel on the Schwinn™ 190 / 590U Bikes

Replacement Procedure
Skill Level: II
Estimated Procedure Time: 20-30 minutes

8030097.081522.A

NOTICE: This document provides instructions for the replacement of the Drive Belt on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

#### Tools Required (not included)

#2 Phillips screwdriver



10 mm socket and wrench



Small flathead screwdriver



2 mm hex wrench







#### Disconnect all power to the machine before you service it.

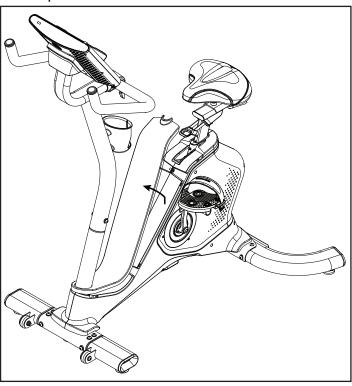
Note: Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

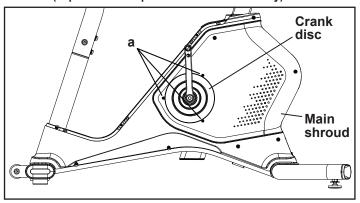


## Rotate top shroud



3. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

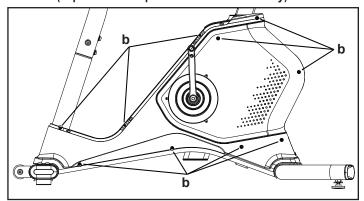
Left side (Top shroud and pedal not shown for clarity)



4. Using a #2 Phillips Screwdriver, remove the 10 screws (b) Left side (Top shroud and pedal not shown for clarity) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.

Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.







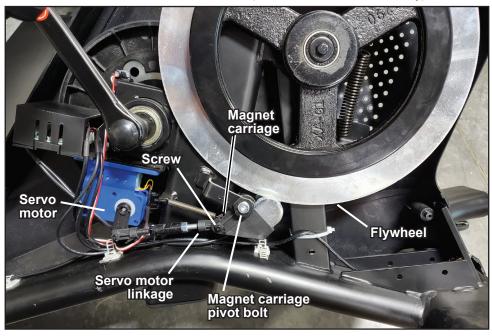


Make sure that power to the machine is disconnected before beginning this step.

5. Using a 2 mm hex wrench, remove the screw (indicated) that attaches the Magnet Carriage to the Servo Motor linkage. Set the screw safely aside for reassembly.

Rotate the Magnet Carriage away from the Flywheel.





6. Using the 10mm socket and wrench, remove the bolt and washer from the Flywheel. While loosening the bolt, hold the Crank Arm to prevent the Crank Arms from rotating. Set the hardware safely aside.

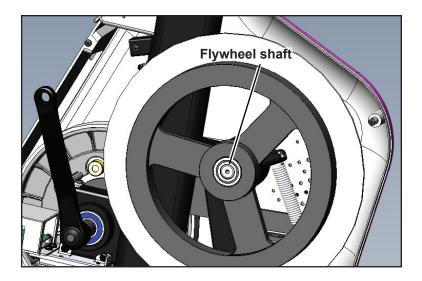
Note: The bolt is reverse-threaded.



7. Slide the old Flywheel off the Flywheel shaft and set it safely aside.

Note: The Flywheel is heavy.

**8.** Slide the new Flywheel into position on the Flywheel shaft. Using the 10 mm socket and wrench, re-install the bolt and washer.

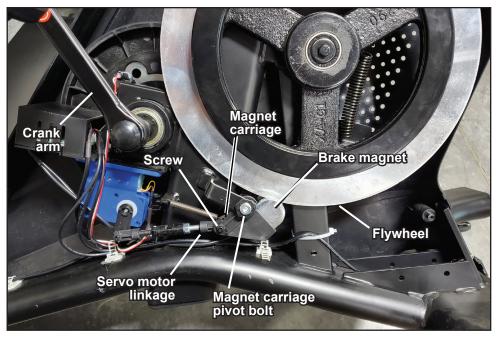


**9.** Pivot the Magnet Carriage back into position. Using a 2 mm hex wrench, re-install the screw (indicated, removed in Step 5) that attaches the Magnet Carriage to the Servo Motor linkage.

**10.** Carefully turn the Crank Arms and check the movement of the Flywheel. Verify that the Brake Magnets and Flywheel do not touch.



Be sure to keep fingers clear of all pinch hazards when you turn the Drive Pulley.



11. Re-install the the Shrouds. Install the top screws first. Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

NOTICE: Be sure not to pinch or cut any cables.

#### 12. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Levelers on the Schwinn™ 190/590U and 290/590R Bikes

Replacement Procedure
Skill Level: I
Estimated Procedure Time: 15 minutes

8030455.010123.A

NOTICE: This document provides instructions for the replacement of the Levelers (adjustable feet) on the Schwinn™ 190 / 590U Upright Bikes and 290 / 590R Recumbent

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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#### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

Static solid object (like a book or box)



Note: Your machine may not match the image. For reference only.

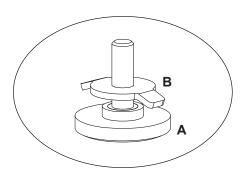
1. Place a static object (like a book or box) under the rear stabilizer. The static object should not be compressible.

2. Loosen and remove the adjustment foot (A) and foot

adjustment nut (B), and set them safely aside.

Schwinn™ 290 shown





3. Installation is the reverse procedure.

*NOTICE:* Carefully align the threads and hand tighten to prevent cross-threading. Then tighten fully.

### 4. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Magnet Carriage on the Schwinn™ 190 / 590U Bikes

Replacement Procedure Skill Level: III

Estimated Procedure Time: 20-30 minutes 8030456.010123.A

NOTICE: This document provides instructions for the replacement of the Magnet Carriage on the Schwinn™ 190 / 590U Upright Bikes. The Magnet Carriage is in the Resistance Magnet with Hardware service kit.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



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Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
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- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

#### Tools Required (not included)

#2 Phillips screwdriver

Small flathead screwdriver (and small piece of cloth)

15 mm open end wrench or pedal wrench19 mm open end wrench or adjustable wrench







2 mm hex wrench 5 mm hex wrench

Needlenose pliers



Uitlity knife or scissors

**Zipties** 





### Disconnect all power to the machine before you service it.

Note: Your machine may not match the image. For reference only.

1. Unplug the AC Adapter from the wall outlet and machine.

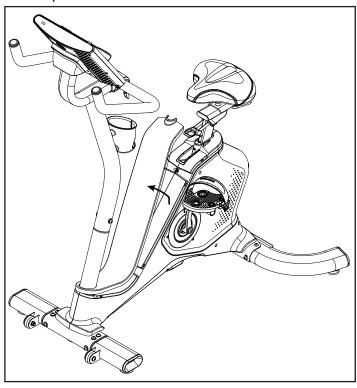
**Note:** We recommend that you spread a cloth or other floor cover under the machine in order to avoid losing small parts that may fall during the procedure.

2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

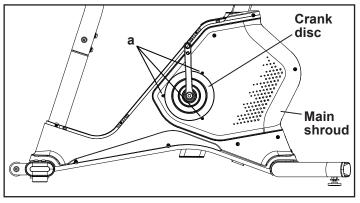


#### Rotate top shroud



3. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

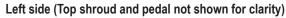
Left side (Top shroud and pedal not shown for clarity)

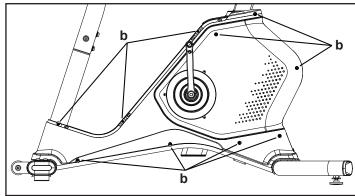


**4.** Using a #2 Phillips Screwdriver, remove the 10 screws (b) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.

Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.



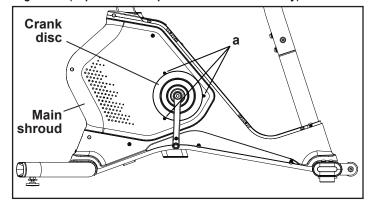






5. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Right Main Shroud. Set them safely aside for reassembly.

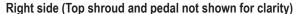
Right side (Top shroud and pedal not shown for clarity)

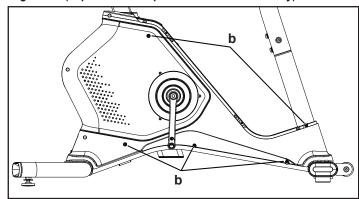


**6.** Using a #2 Phillips Screwdriver, remove the 5 screws (b) that secure the Right Shroud. Remove the bottom screws first, and then the top screws.

**Note:** It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Right Main Shroud. Set the parts safely aside for reassembly.



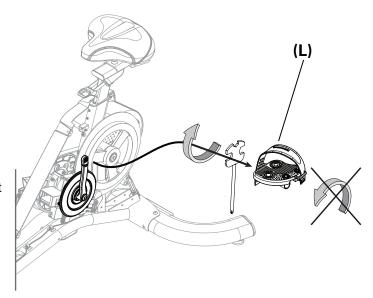


**Note:** It may be easier to get access to the hardware fasteners if the Crank Ring Cover (Crank Disc) is removed.

#### To remove the Crank Disc:

7. Using a pedal wrench or 15mm open end wrench, loosen and remove the Left Pedal. Set it safely aside for reassembly.

Note: The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".

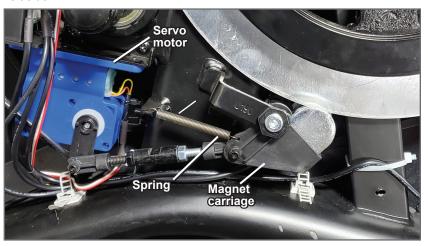


**8.** Turn the Crank Arm to point up toward the front of the bike. Carefully angle the Crank Disc and slide it over the Crank Arm. Set it safely aside.



**9.** On the left side of the machine, carefully disconnect the Spring from the Magnet Carriage arm using needlenose pliers.

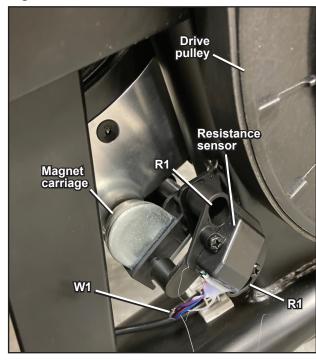
Left side



**10.** On the right side of the machine, carefully remove the screws (R1) that attach the Resistance Sensor using a #2 Phillips Screwdriver. Carefully move the Resistance Sensor and wire (W1) out of the way.

NOTICE: Do not pinch or cut the cables.

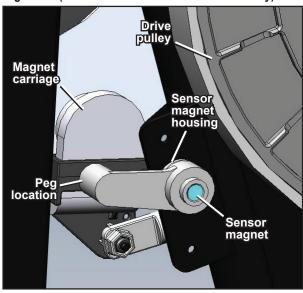
Right side



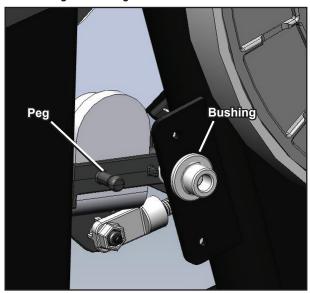
**11.** Carefully remove the Sensor Magnet Housing. Pull the Housing off the Peg and Bushing. Set it safely aside for reassembly.

NOTICE: Make sure not to lose the Bushing and Spring. If they come off, set them safely aside for reassembly.

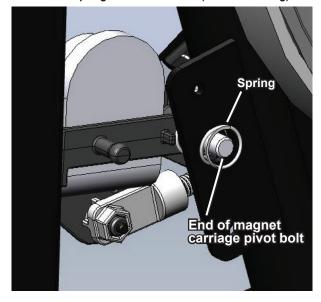
Right side (Resistance Sensor not shown for clarity)



Sensor magnet housing removed



Location of spring in mount bracket (behind bushing)



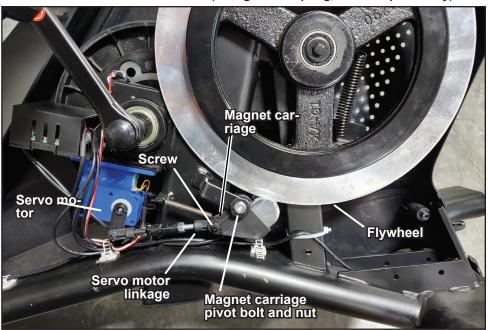


Make sure that power to the machine is disconnected before beginning this step.

**12.** Using a 2 mm hex wrench, carefully loosen and remove the screw (indicated) and nut that attach the Servo Motor linkage to the Magnet Carriage arm. Set them safely aside for reassembly.

Rotate the Magnet Carriage away from the Flywheel.





**13.** Using a 5 mm hex wrench and 19 mm open end wrench, loosen and remove the pivot bolt and nut that hold the Magnet Carriage in the mount brackets on the frame.

Note: Support the Magnet Carriage so that it does not fall.

Remove the old Magnet Carriage, and set the parts safely aside.

**14.** Align the new Magnet Carriage with the mount brackets and Spring on the frame. Using a 5 mm hex wrench and 19 mm open end wrench, install the pivot bolt and nut.

Re-install the Bushing if it was removed.

15. Pivot the Magnet Carriage back into position.

Using a 2 mm hex wrench, re-install the screw and nut (removed in Step 12) that attach the Magnet Carriage arm to the Servo Motor linkage.

- **16.** The remainder of reassembly is the reverse procedure.
- 17. Re-install the Crank Discs (if removed) and the Shrouds.

To install the Shrouds, put the Left Shroud in position first to align the screws for the Right Shroud. Install the top screws first.

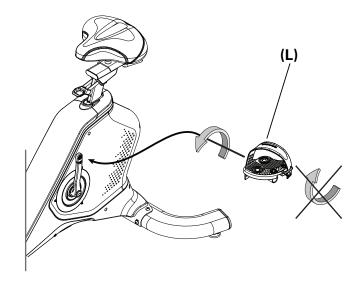
Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

**18.** Attach the Pedals (if removed). Start the Pedal by hand, and then fully tighten with the Pedal Wrench. The Pedals must be fully tightened.



If the threads strip due to improper installation, then the Pedals can disengage from the bike and/or break while under usage, which can result in serious injury to the user.

Note: The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



#### 19. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the PCBA Assembly (Base Hub) on the Schwinn™ 190 / 590U Bikes

Replacement Procedure Skill Level: III

Estimated Procedure Time: 20-30 minutes 8030094.081522.A

NOTICE: This document provides instructions for the replacement of the PCBA assembly (base hub and mount) on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



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Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
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- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

#2 Phillips screwdriver



Needlenose pliers



Small flathead screwdriver (and small piece of cloth)



Utility knife or scissors to cut ziptie

Ziptie

Pedal wrench or 15mm open end wrench





*NOTICE:* It is necessary to adjust the Magnetic Resistance Sensor at the end of this procedure. Refer to the "Adjust the Resistance Sensor (Calibration)" procedure.

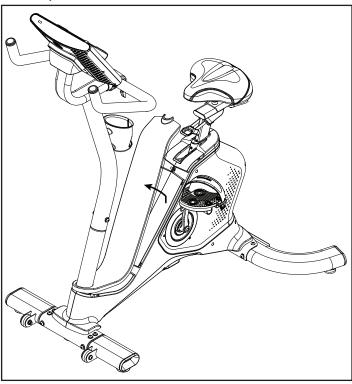
Note: Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

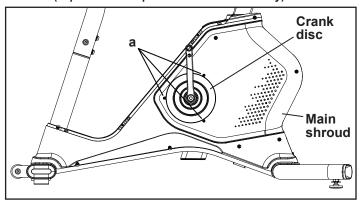


## Rotate top shroud

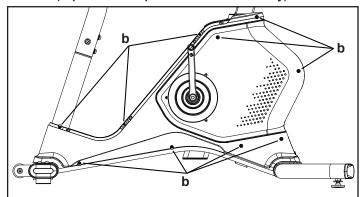


3. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

Left side (Top shroud and pedal not shown for clarity)



4. Using a #2 Phillips Screwdriver, remove the 10 screws (b) Left side (Top shroud and pedal not shown for clarity) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.



Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.



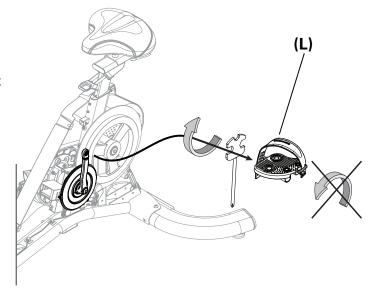


Note: It may be easier to get access to the PCBA assembly if the Crank Ring Cover (Crank Disc) is removed.

### To remove the Crank Disc:

5. Using a pedal wrench or 15mm open end wrench, loosen and remove the Left Pedal. Set it safely aside for reassembly.

Note: The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



**6.** Turn the Crank Arm to point up toward the front of the bike. Carefully angle the Crank Disc and slide it over the Crank Arm. Set it safely aside.

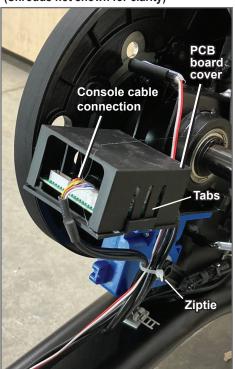


7. Slightly press the tabs on the PCB board cover and remove the cover. Note the cable connections to the PCBA on your machine.

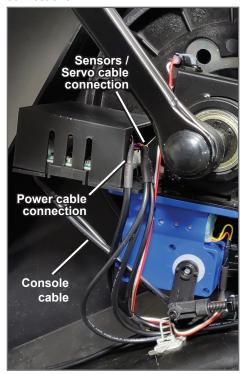
Using needlenose pliers, carefully peel the glue away from the cable connectors, and disconnect the cables from the PCBA.

*NOTICE:* It may be necessary to remove a ziptie from the cables. Do not pinch or cut the cables.

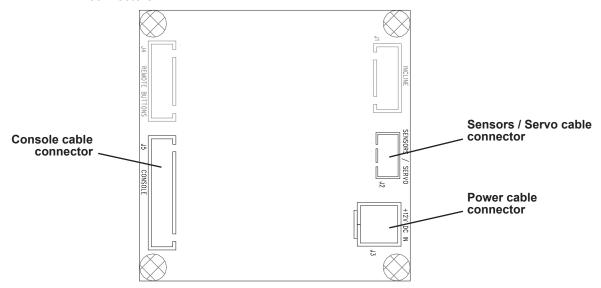
Console cable connection (Shrouds not shown for clarity)



Power cable and Sensors / Servo cable connections



#### **PCBA** connectors



**8.** Using a #2 Phillips Screwdriver, remove the 2 screws that attach the PCBA assembly to the Main Frame. Set them safely aside for reassembly.

Note: Support the PCB board holder so that it does not fall

Carefully remove the old PCBA assembly and discard it. *NOTICE:* Do not pinch or cut the cables.

NOTICE: The components on the PCBA are sensitive to electrostatic discharge (ESD). To help reduce the risk of ESD while handling the PCBA:

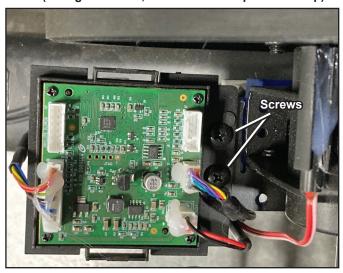
- 1) Before touching the PCBA, discharge yourself of built-up static charge by simply touching the metal frame of the bike.
- 2) Handle the PCBA from the edges.
- **9.** Carefully remove the PCB board cover from the new PCBA assembly. Using a #2 Phillips Screwdriver, install the new PCBA assembly to the Main Frame. Carefully connect the cables to the PCBA and re-install the PCB board cover.

NOTICE: Do not pinch or cut the cables. Be sure the cable connections for the new PCBA assembly are correct. Replace ziptie on the cables (if removed) to prevent interference from moving parts.

#### Calibration:

**10.** After the new PCBA assembly is installed, it is necessary to calibrate the Magnetic Resistance Sensor. Refer to the "Adjust the Resistance Sensor (Calibration)" procedure.

PCBA (disregard cables, disconnected in previous step)

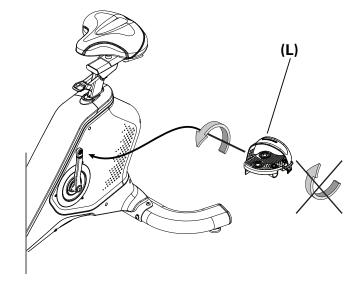


- 11. Re-install the Crank Disc (if removed) and the Shrouds. Install the top screws first. Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.
- 12. Attach the Left Pedal (if removed). Start the Pedal by hand, and then fully tighten with the Pedal Wrench. The Pedals must be fully tightened.



If the threads strip due to improper installation, then the Pedals can disengage from the bike and/or break while under usage, which can result in serious injury to the user.

Note: The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



#### 13. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Pedals on the Schwinn™ 190/590U and 290/590R Bikes

Replacement Procedure Skill Level: II

Estimated Procedure Time: 20-30 minutes 8030457.010123.A

NOTICE: This document provides instructions for the replacement of the Pedals on the Schwinn™ 190 / 590U Upright Bikes and 290 / 590R Recumbent Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

# ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

Pedal wrench or 15mm open end wrench

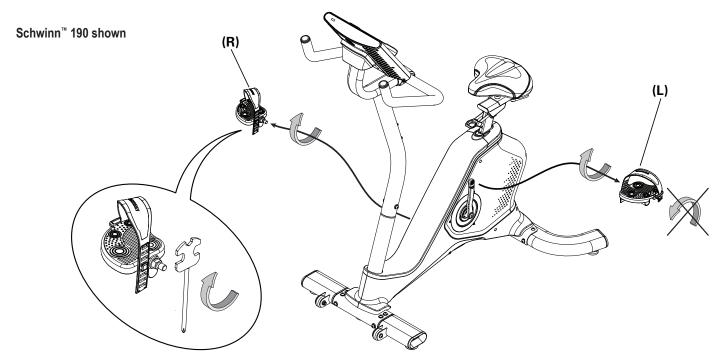




Note: Your machine may not match the image. For reference only.

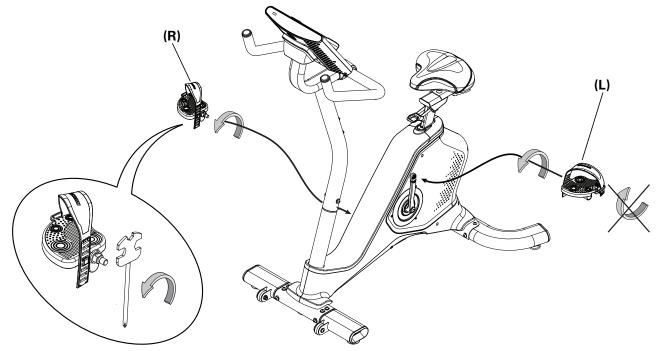
1. Loosen and remove the old Pedals. Discard the old Pedals.

**Note:** The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



**2**. Install the new Pedals. Carefully align the threads and hand tighten to prevent cross-threading. Then tighten fully with pedal wrench.

**Note:** The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



#### 3. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Resistance Sensor on the Schwinn™ 190 / 590U Bikes

Replacement Procedure Skill Level: III

Estimated Procedure Time: 20-30 minutes 8030458.010123.A

NOTICE: This document provides instructions for the replacement of the Resistance Sensor and Resistance Magnet/Housing on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

**Tools Required (not included)** 

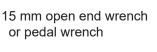
#2 Phillips screwdriver



Needlenose pliers



Small flathead screwdriver (and small piece of cloth)







*NOTICE:* It is necessary to adjust the Magnetic Resistance Sensor at the end of this procedure. Refer to the "Adjust the Resistance Sensor (Calibration)" procedure.

Note: Your machine may not match the image. For reference only.

1. Unplug the AC Adapter from the wall outlet and machine.

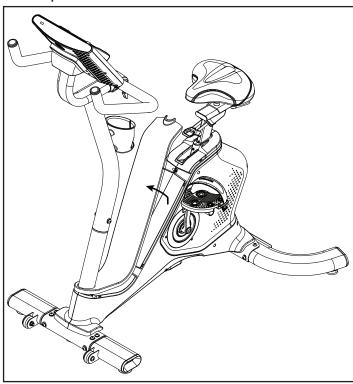
**Note:** We recommend that you spread a cloth or other floor cover under the machine in order to avoid losing small parts that may fall during the procedure.

2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

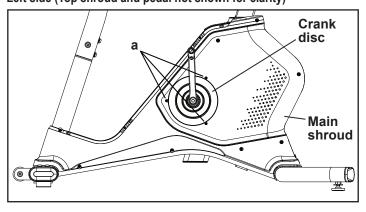


#### Rotate top shroud



3. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

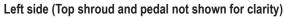
Left side (Top shroud and pedal not shown for clarity)

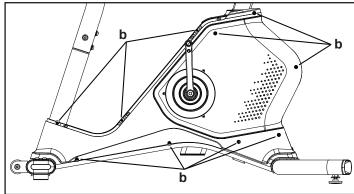


**4.** Using a #2 Phillips Screwdriver, remove the 10 screws (b) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.

**Note:** It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.



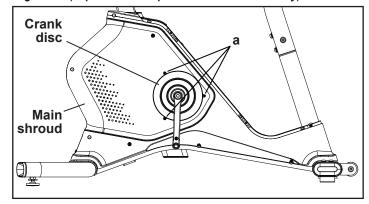






5. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Right Main Shroud. Set them safely aside for reassembly.

Right side (Top shroud and pedal not shown for clarity)

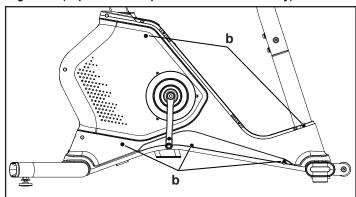


**6.** Using a #2 Phillips Screwdriver, remove the 5 screws (b) that secure the Right Shroud. Remove the bottom screws first, and then the top screws.

Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Right Main Shroud. Set the parts safely aside for reassembly.

#### Right side (Top shroud and pedal not shown for clarity)

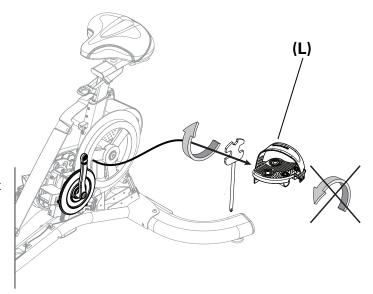


**Note:** It may be easier to get access to the hardware fasteners if the Crank Ring Cover (Crank Disc) is removed.

#### To remove the Crank Disc:

7. Using a pedal wrench or 15mm open end wrench, loosen and remove the Left Pedal. Set it safely aside for reassembly.

Note: The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".

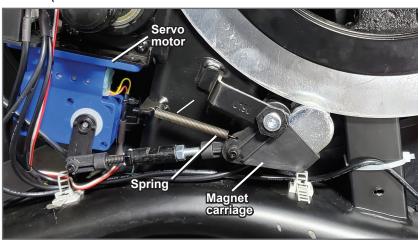


**8.** Turn the Crank Arm to point up toward the front of the bike. Carefully angle the Crank Disc and slide it over the Crank Arm. Set it safely aside.



**9.** On the left side of the machine, carefully disconnect the Spring from the Magnet Carriage arm using needlenose pliers.

Left side (



**10.** On the right side of the machine, carefully peel the glue away from the cable connector on the Resistance Sensor using needlenose pliers. Carefully disconnect the wiring harness (W1) from the Resistance Sensor, and move the wiring harness out of the way.

NOTICE: Do not pinch or cut the cables.

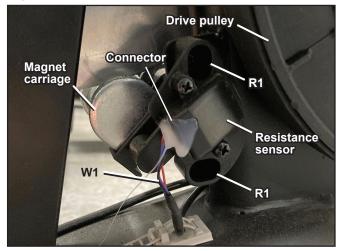
11. Using a #2 Phillips Screwdriver, carefully remove the screws (R1) that attach the Resistance Sensor. Set them safely aside for reassembly.

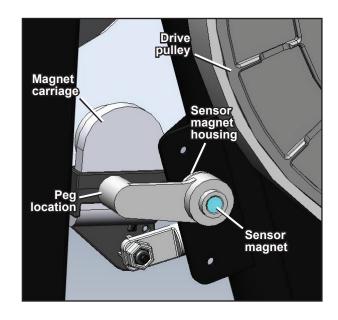
Carefully remove the old Resistance Sensor and set it safely aside.

**12.** Carefully remove the old Sensor Magnet Housing. Pull the Housing off the Peg and Bushing. Set it safely aside.

NOTICE: Make sure not to lose the Spring. If it comes off, set it safely aside for reassembly.

Right side—Resistance sensor connection

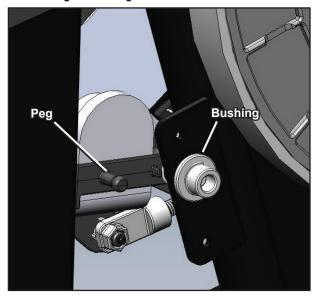




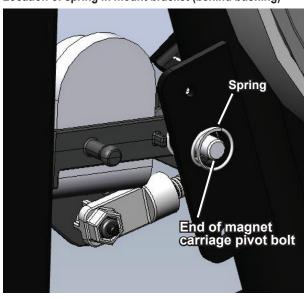
13. Carefully remove the old Bushing. Set it safely aside.

NOTICE: Make sure not to lose the Spring. If it comes off, set it safely aside for reassembly.

Sensor magnet housing removed



Location of spring in mount bracket (behind bushing)



**14.** Installation of the new Resistance Magnet/Housing and Resistance Sensor is the reverse procedure.

Put the new Bushing in position on the Spring and Magnet Carriage bolt end. Using a #2 Phillips Screwdriver, install the new Resistance Sensor to the mount bracket. Carefully connect the wiring harness to the Resistance Sensor.

NOTICE: Do not pinch or cut the cables.

### Calibration:

**15.** After the new Resistance Sensor assembly is installed, it is necessary to calibrate the Magnetic Resistance Sensor. Refer to the "Adjust the Resistance Sensor (Calibration)" procedure.

16. Re-install the Crank Discs (if removed) and the Shrouds.

To install the Shrouds, put the Left Shroud in position first to align the screws for the Right Shroud. Install the top screws first.

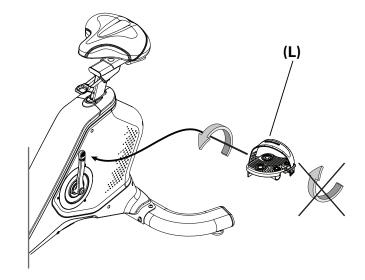
Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

17. Attach the Pedals (if removed). Start the Pedal by hand, and then fully tighten with the Pedal Wrench. The Pedals must be fully tightened.



If the threads strip due to improper installation, then the Pedals can disengage from the bike and/or break while under usage, which can result in serious injury to the user.

Note: The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



#### 18. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the RPM Sensor (Speed Sensor) on the Schwinn™ 190 / 590U Bikes

Replacement Procedure Skill Level: II

Estimated Procedure Time: 20-30 minutes 8030105.081522.A

NOTICE: This document provides instructions for the replacement of the RPM Sensor (Speed Sensor) on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing
  maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If
  purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for
  them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

# ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

#2 Phillips screwdriver



Utility knife or scissors to cut ziptie Ziptie

Small flathead screwdriver (and small piece of cloth)



Pedal wrench or 15mm open end wrench







#### Disconnect all power to the machine before you service it.

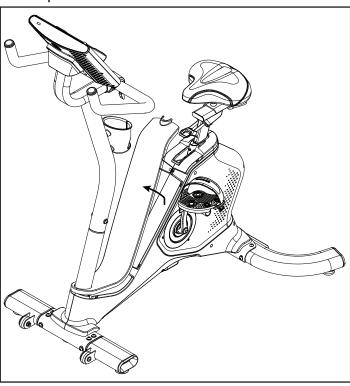
Note: Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

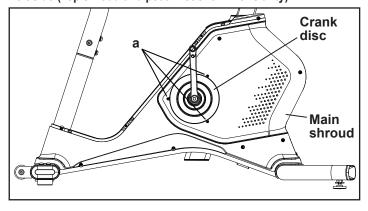


## Rotate top shroud

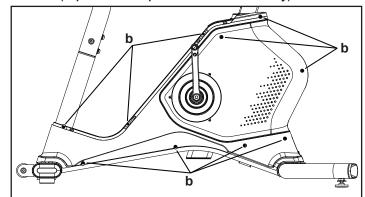


3. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

Left side (Top shroud and pedal not shown for clarity)



4. Using a #2 Phillips Screwdriver, remove the 10 screws (b) Left side (Top shroud and pedal not shown for clarity) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.



Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.



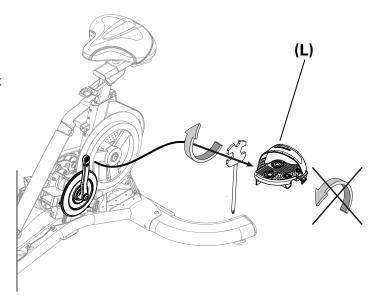


Note: It may be easier to get access to the RPM Sensor and cables if the Crank Ring Cover (Crank Disc) is removed.

#### To remove the Crank Disc:

5. Using a pedal wrench or 15mm open end wrench, loosen and remove the Left Pedal. Set it safely aside for reassembly.

Note: The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



**6.** Turn the Crank Arm to point up toward the front of the bike. Carefully angle the Crank Disc and slide it over the Crank Arm. Set it safely aside.



7. Observe the cable routing from the RPM Sensor to wiring harness (W1) on your machine. Release the clip(s) that attaches the RPM Sensor cable (C1) to the Frame. Carefully disconnect the RPM Sensor cable from the wiring harness.

NOTICE: Do not pinch or cut the cables.



Connectors



Cable clip



8. Remove the screw that attaches the RPM Sensor to the Main Frame. Carefully remove the old RPM Sensor and cable and discard it.

NOTICE: Do not pinch or cut the cables.



**9.** Installation of the new RPM Sensor is the reverse procedure.

NOTICE: Do not pinch or cut the cables. Be sure the routing for the new RPM Sensor cable (C1) and other wiring is correct to prevent interference from moving parts.

**Note:** Before fully attaching the Shrouds, verify that the RPM Sensor and Speed Sensor Magnets on the Drive Pulley do not touch.

- **10.** Re-install the Crank Disc (if removed) and the Shrouds. Install the top screws first. Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.
- 11. Attach the Left Pedal (if removed). Start the Pedal by hand, and then fully tighten with the Pedal Wrench. The Pedals must be fully tightened.



If the threads strip due to improper installation, then the Pedals can disengage from the bike and/or break while under usage, which can result in serious injury to the user.

Note: The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike.

Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".

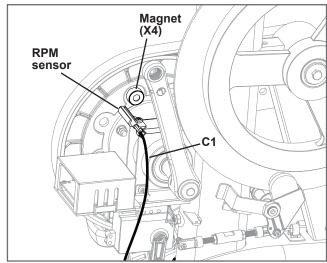
#### 12. Final Inspection

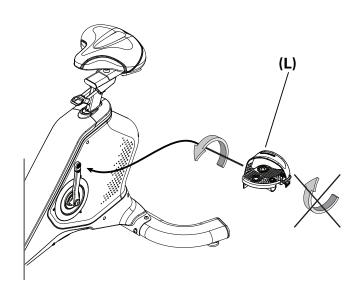
Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.

### Shrouds not shown for clarity







# Replace the Servo Arm (Linkage) on the Schwinn™ 190 / 590U Bikes

Replacement Procedure Skill Level: III

Estimated Procedure Time: 25-30 minutes 8030459.010123.A

NOTICE: This document provides instructions for the replacement of the Servo Arm (linkage) on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



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Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
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- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools Required (no	ot included)
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#2 Phillips screwdriver



2 mm hex wrench



Small flathead screwdriver (and small piece of cloth)



10 mm open end wrench



Pedal wrench or 15mm open end wrench







### Disconnect all power to the machine before you service it.

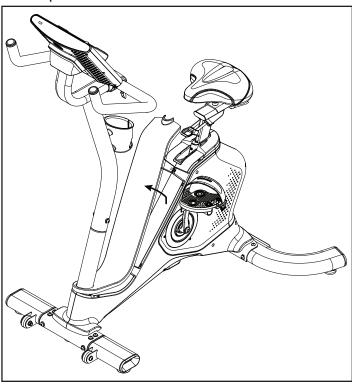
Note: Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

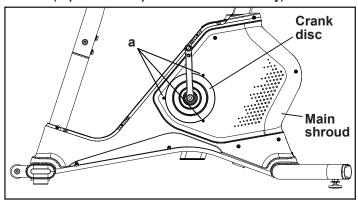


### Rotate top shroud

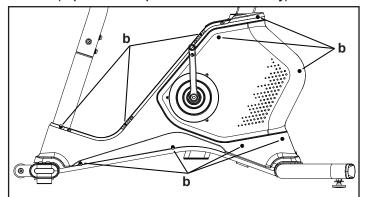


3. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

Left side (Top shroud and pedal not shown for clarity)



4. Using a #2 Phillips Screwdriver, remove the 10 screws (b) Left side (Top shroud and pedal not shown for clarity) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.



Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.



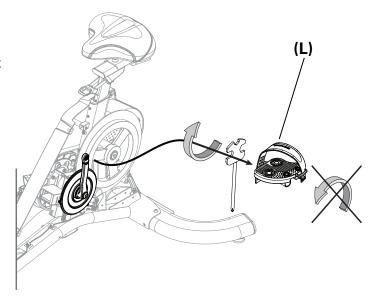


Note: It may be easier to get access to the Servo Motor if the Crank Ring Cover (Crank Disc) is removed.

### To remove the Crank Disc:

5. Using a pedal wrench or 15mm open end wrench, loosen and remove the Left Pedal. Set it safely aside for reassembly.

Note: The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



**6.** Turn the Crank Arm to point up toward the front of the bike. Carefully angle the Crank Disc and slide it over the Crank Arm. Set it safely aside.





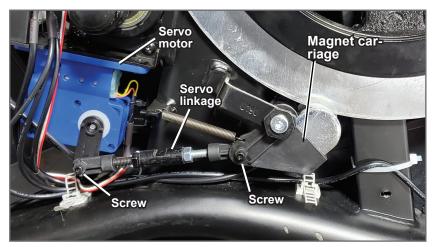
Make sure that power to the machine is disconnected before beginning this step.

7. Using a 2 mm hex wrench, remove the indicated screws and nuts that attach the Servo Arm (linkage) to the Servo Motor and Magnet Carriage.

Carefully remove the old Servo linkage and keep it for Step 8.

NOTICE: Do not pinch or cut the cables.

Set the screws and nuts safely aside for reassembly.



**8.** In order to install the new Servo linkage, it must be the same length as the old linkage. Compare the new Servo linkage to the old linkage.

NOTICE: If the new Servo linkage is not the same length, it is necessary to adjust it.

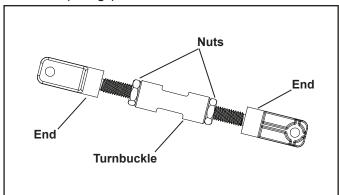
9. To adjust the length, loosen the locking nuts on the turnbuckle using a 10 mm open end wrench. Then turn the ends of the Servo linkage until it is the same length as the old linkage.

NOTICE: Adjust the threaded ends evenly to ensure that they do not detach or unscrew. The ends must be aligned in order to re-install the screws in Step 10.

Using a 10 mm open end wrench, carefully tighten the locking nuts to secure the adjustment.

Discard the old Servo linkage.

#### Servo arm (linkage)



**10.** Using a 2 mm hex wrench, carefully install the new Servo linkage with the screws and nuts that were removed in Step 7.

NOTICE: Do not pinch or cut the cables.

11. Re-install the Crank Disc (if removed) and the Shrouds. Install the top screws first.

NOTICE: Do not pinch or cut the cables.

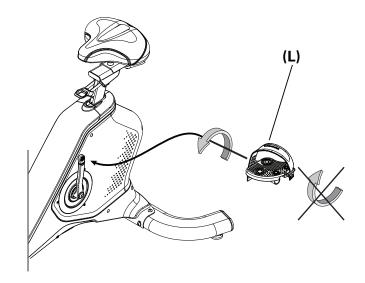
Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

12. Attach the Left Pedal (if removed). Start the Pedal by hand, and then fully tighten with the Pedal Wrench. The Pedals must be fully tightened.



If the threads strip due to improper installation, then the Pedals can disengage from the bike and/or break while under usage, which can result in serious injury to the user.

Note: The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



#### 13. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Servo Motor on the Schwinn™ 190 / 590U Bikes

Replacement Procedure
Skill Level: III
Estimated Procedure Time: 25-30 minutes

8030096.010123.B

NOTICE: This document provides instructions for the replacement of the Servo Motor on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



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Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

#2 Phillips screwdriver



2 mm hex wrench



Small flathead screwdriver (and small piece of cloth)



Pedal wrench or 15mm open end wrench







### Disconnect all power to the machine before you service it.

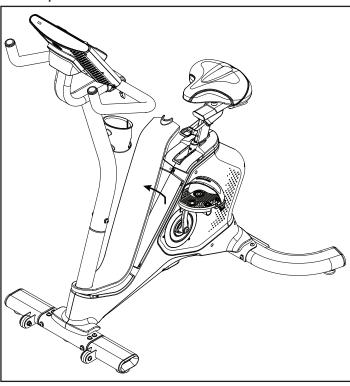
Note: Your machine may not match the image. For reference only.

- 1. Unplug the AC Adapter from the wall outlet and machine.
- 2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

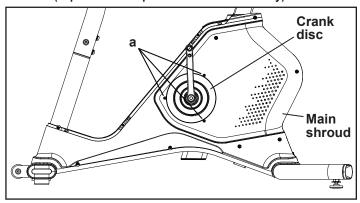


### Rotate top shroud

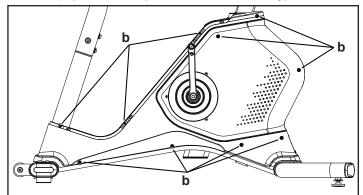


3. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

Left side (Top shroud and pedal not shown for clarity)



4. Using a #2 Phillips Screwdriver, remove the 10 screws (b) Left side (Top shroud and pedal not shown for clarity) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.



Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.



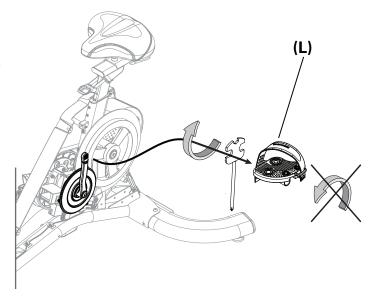


Note: It may be easier to get access to the Servo Motor if the Crank Ring Cover (Crank Disc) is removed.

### To remove the Crank Disc:

5. Using a pedal wrench or 15mm open end wrench, loosen and remove the Left Pedal. Set it safely aside for reassembly.

Note: The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



**6.** Turn the Crank Arm to point up toward the front of the bike. Carefully angle the Crank Disc and slide it over the Crank Arm. Set it safely aside.

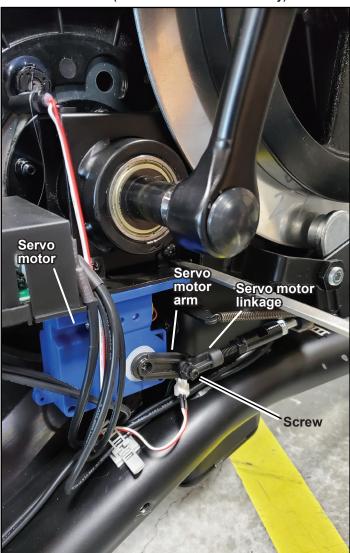


A

Make sure that power to the machine is disconnected before beginning this step.

7. Using a 2 mm hex wrench, remove the indicated screw that attaches the Servo Motor arm to the Servo Motor linkage. Set the screw safely aside for reassembly.

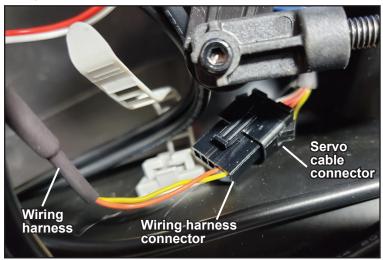
Left shroud removed (Crank disc not shown for clarity)



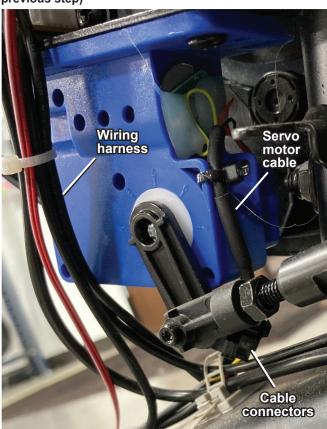
**8.** Carefully disconnect the Servo Motor cable from the wiring harness.

NOTICE: Do not pinch or cut the cables.

Servo motor cable and wiring harness connectors (disregard linkage, detached in previous step)



Servo motor cable (disregard linkage, detached in previous step)

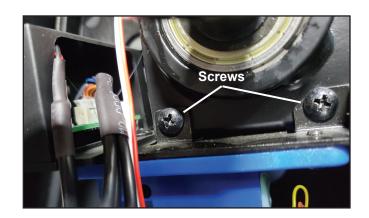


**9.** Using a #2 Phillips Screwdriver, remove the 2 screws that attach the Servo Motor and bracket assembly to the Main Frame. Set them safely aside for reassembly.

**Note:** Support the Servo Motor so that it does not fall.

Carefully remove the old Servo Motor assembly and discard.

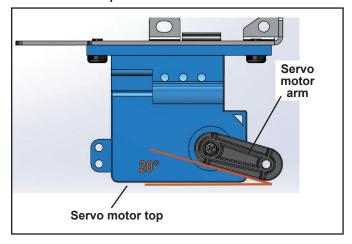
NOTICE: Do not pinch or cut the cables.



**10.** Before installing the new Servo Motor, inspect it to be sure that the Servo Motor arm is in the correct position as shown.

NOTICE: The angle between the Servo Motor arm and Servo top should be 20° (+3/-0). If the arm is not in the correct position. it could cause the linkage to roll over the wrong way and jam during operation.

#### Servo motor arm position



11. Installation is the reverse procedure.

Re-install the Crank Disc (if removed) and the Shrouds. Install the top screws first.

NOTICE: Do not pinch or cut the cables.

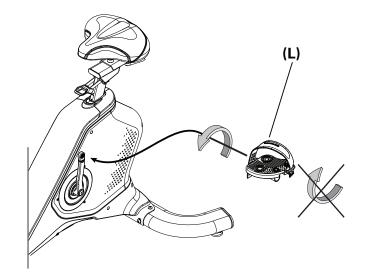
Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

12. Attach the Left Pedal (if removed). Start the Pedal by hand, and then fully tighten with the Pedal Wrench. The Pedals must be fully tightened.



If the threads strip due to improper installation, then the Pedals can disengage from the bike and/or break while under usage, which can result in serious injury to the user.

Note: The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".



### 13. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Shrouds on the Schwinn™ 190 / 590U Bikes

Replacement Procedure

Skill Level: II Estimated Procedure Time: 20-30 minutes 8030106.010123.B

NOTICE: This document provides instructions for the replacement of the Main Shrouds and Top Shroud on the Schwinn™ 190 / 590U Upright Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
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- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

#2 Phillips screwdriver, long



6mm hex wrench



Flathead screwdriver (and small piece of cloth)



Pedal wrench or 15mm open end wrench







### Disconnect all power to the machine before you service it.

Note: Your machine may not match the image. For reference only.

1. Unplug the AC Adapter from the wall outlet and machine.

If you are replacing the Top Shroud, go to Section 2.

If you are replacing the Main Shrouds, continue to Section 1, step 2.

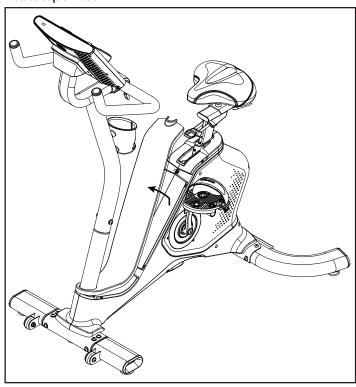
### Section 1

2. Flex the edges of the Top Shroud to disengage the inside tabs from the Main Assembly. Carefully rotate the Shroud on the Console Mast to get access to the Main Shroud screws.

**Note:** It may be easier to pry up the edges of the Top Shroud using a flathead screwdriver. To avoid damage to the surface of the Shrouds, we recommend putting a piece of cloth over the screwdriver blade.

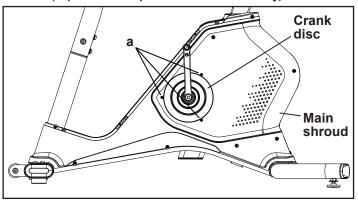


### Rotate top shroud

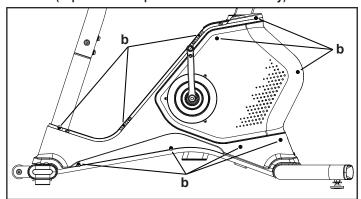


3. Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Left Main Shroud. Set them safely aside for reassembly.

Left side (Top shroud and pedal not shown for clarity)



4. Using a #2 Phillips Screwdriver, remove the 10 screws (b) Left side (Top shroud and pedal not shown for clarity) that secure the Left Shroud. Remove the bottom screws first, and then the top screws.



Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

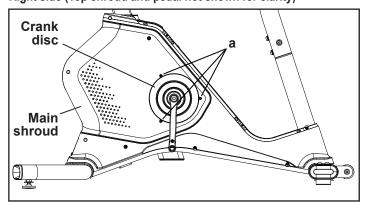
Carefully angle and remove the Left Main Shroud. Remove the Bolt Catch Insert at the base of the Seat Post. Set the parts safely aside for reassembly.





Using a #2 Phillips Screwdriver, remove 3 screws (a) that attach the Crank Disc to the Right Main Shroud. Set them safely aside for reassembly.

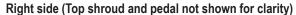
Right side (Top shroud and pedal not shown for clarity)

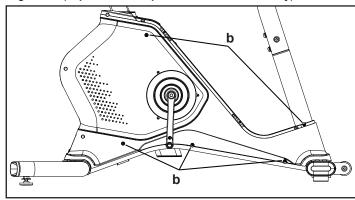


**6.** Using a #2 Phillips Screwdriver, remove the 5 screws (b) that secure the Right Shroud. Remove the bottom screws first, and then the top screws.

Note: It is not necessary to remove the Crank Arm and Crank Disc in order to remove the Shroud. Turn the Crank Arm to point up toward the front of the bike.

Carefully angle and remove the Right Main Shroud. Set the parts safely aside for reassembly.





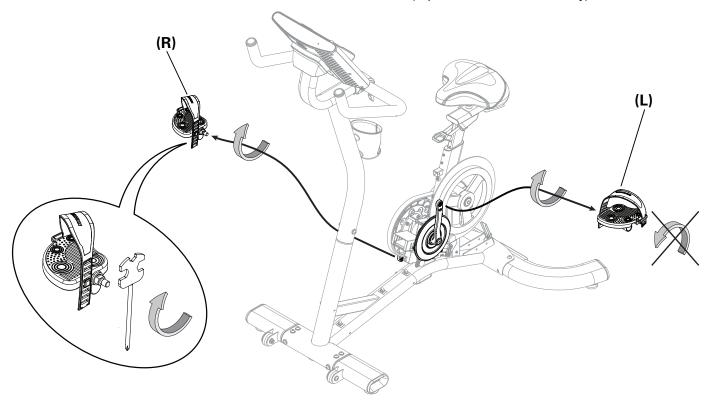
If you are replacing the Crank Ring Covers (Crank Discs), continue to step 7.

If you are not replacing the Crank Discs, go to step 10.

7. Using a pedal wrench or 15mm open end wrench, loosen and remove the Pedal. Set it safely aside for reassembly.

Note: The Left Pedal is reverse-threaded. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".

### Left side (Top shroud not shown for clarity)



**8.** Turn the Crank Arm to point up toward the front of the bike. Carefully angle the Crank Disc and slide it over the Crank Arm. Set it safely aside.

Left side shown



- **9.** Install the new Crank Discs. Be sure the Crank Arm points up toward the front of the bike. Carefully angle the new Crank Disc and slide it over the Crank Arm into position.
- **10.** To install the Main Shrouds, put the Left Shroud in position first to align the screws for the Right Shroud.

Be sure the Crank Arm points up toward the front of the bike. Carefully angle the new Main Shroud and slide it over the Crank Arm into position.

NOTICE: Be sure not to pinch or cut any cables.

- 11. Using a #2 Phillips Screwdriver, attach the Crank Disc to the Main Shroud. Install the top screws first.
- 12. Repeat steps 10 and 11 for the Right Shroud.
- **13.** Using a #2 Phillips Screwdriver, attach the Main Shrouds. Install the top screws first.

If you are replacing the Top Shroud, refer to Section 2, steps 3 - 4.

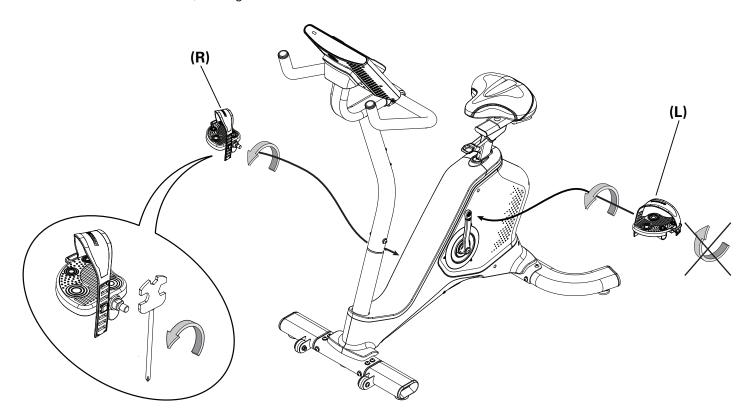
Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

**14.** Re-install the Pedals (if removed). Start the Pedals by hand, and then fully tighten them with the Pedal Wrench or 15 mm wrench. The Pedals must be fully tightened.



If the threads strip due to improper installation, then the Pedals can disengage from the bike and/or break while under usage, which can result in serious injury to the user.

Note: The Left Pedal is reverse-threaded. Be sure to attach Pedals on the correct side of the Bike. Orientation is based from a seated position on the bike. The Left Pedal has an "L", the Right Pedal an "R".

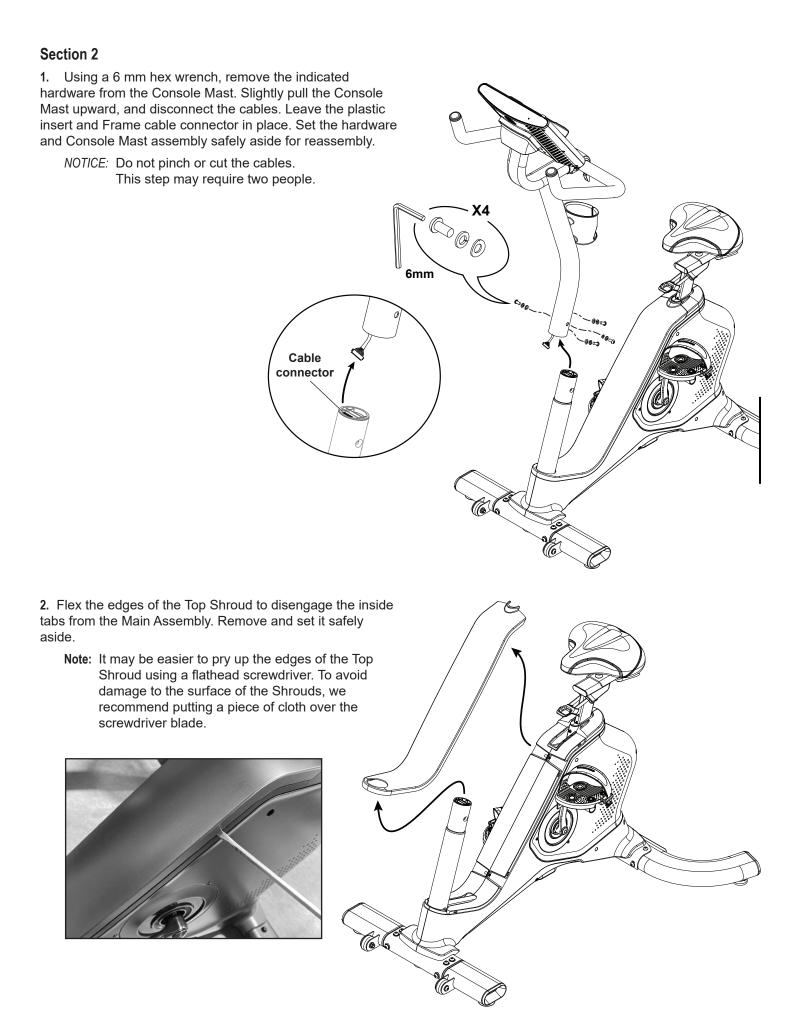


### 15. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



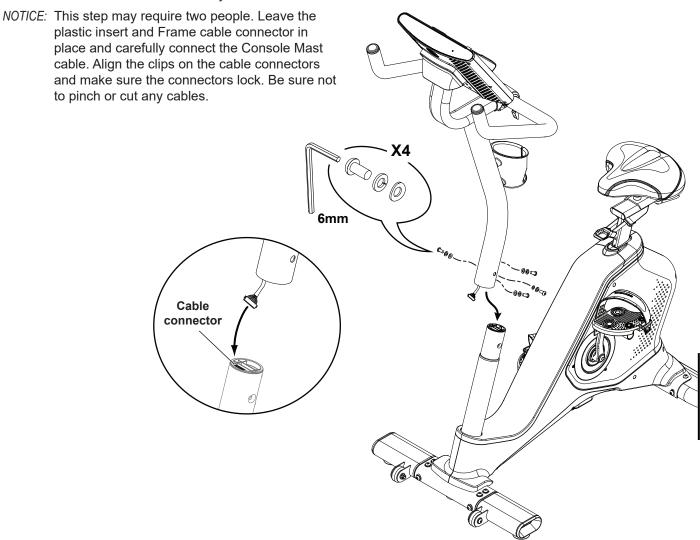
Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



#### 3. Installation is the reverse procedure.

Put the Top Shroud opening over the Console Mast mount, and press the Shroud into position. Installation of the Top Shroud does not require the use of the screwdriver. Be sure the tabs in the Top Shroud snap into the Main Assembly.

### 4. Re-install the Console Mast assembly.



### 5. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.



# Replace the Stabilizer Pads on the Schwinn™ 190/590U and 290/590R Bikes

Replacement Procedure
Skill Level: II
Estimated Procedure Time: 20-30 minutes

8030460.010123.A

NOTICE: This document provides instructions for the replacement of the Stabilizer Pads (footpads) on the Schwinn™ 190 / 590U Upright Bikes and 290 / 590R Recumbent

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



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- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

4 mm Hex wrench



Static solid object (like a book or box)



Note: Your machine may not match the image. For reference only.

1. Place a static object (like a book or box) under the front stabilizer. The static object should not be compressible.

Schwinn™ 290 shown



2. Using a 4 mm hex wrench, loosen and remove the screw (A), lock washer (B) and flat washer (C) from the Stabilizer Pad (footpad), and set them safely aside. Remove the Footpad from the front stabilizer, and set it safely aside.

3. Installation is the reverse procedure.

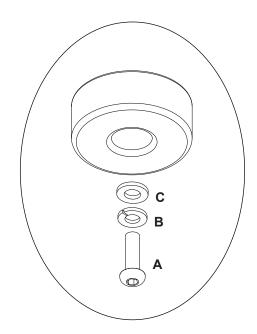
NOTICE: Carefully align the threads and hand tighten to prevent cross-threading. Then tighten fully with 4 mm hex wrench.

### 4. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.





# Replace the Transport Wheels on the Schwinn™ 190/590U and 290/590R Bikes

Replacement Procedure
Skill Level: I
Estimated Procedure Time: 15 minutes

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NOTICE: This document provides instructions for the replacement of the Transport Wheels on the Schwinn™ 190 / 590U Upright Bikes and 290 / 590R Recumbent Bikes.

If you need assistance, please contact Customer Service (if purchased in US/Canada) or your local distributor (if purchased outside US/Canada). To find your local distributor, go to: www.nautilusinternational.com



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

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### Important Safety Instructions - Before servicing or using this equipment, obey the following warnings:



This icon means a potentially hazardous situation which, if not avoided, could result in death or serious injury. Read and understand all Warnings on this machine.

Disconnect all power to the machine before you service it.

- Read and understand the Part Replacement Procedure before working on the machine. Failure to obey the instructions and safety warnings could cause injury to the service technician or bystanders.
- Keep bystanders and children away from the product being serviced at all times.
- Make sure that the repair is done in an appropriate work space away from foot traffic and exposure to bystanders.
- Some components of the equipment can be heavy or awkward. Enlist the service of a second person when you do maintenance steps involving these components. Do not try to do heavy or awkward steps on your own.
- If replacement parts are necessary, use only genuine Nautilus replacement parts and hardware. Failure to use genuine replacement parts can cause a risk to users, keep the machine from operating correctly and void the warranty.
- Be sure that all warning stickers and instructional placards applied to the product stay present and in good condition when doing maintenance or replacing components. If at any time the Warning labels become loose, unreadable or dislodged, replace the labels. If purchased in US/Canada, contact Customer Service for replacement labels. If purchased outside US/Canada, contact your local distributor for them.
- Do not try to change the design or functionality of the machine being serviced as this can adversely affect user safety.
- Do not use the machine until all shrouds, instructions, warning labels and correct functionality have been verified and tested for correct performance.

## ·SAVE THESE INSTRUCTIONS.

Tools Required (not included)

6 mm Hex wrench



10 mm Open end wrench





Note: Your machine may not match the image. For reference only.

1. Use the 10 mm open end wrench to hold the nut (C) steady and remove the screw (A) and washers (B) with the 6 mm hex wrench. Remove the Transport Wheel. Set the old parts safely aside.

Schwinn™ 290 shown



Using the 10 mm open end wrench and 6 mm hex wrench, install the new Transport Wheel in the bracket. NOTICE: Be sure to tighten the hardware fully.

### 3. Final Inspection

Inspect your machine to ensure that all hardware is tight and components are properly assembled.



Do not use until the machine has been fully assembled and inspected for correct performance in accordance with the Owner's Manual.