PRECOR®

Service Manual

SBK800-16 INDOOR CYCLES

SPINNER® CHRONO™ POWER
SPINNER® CLIMB™

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Introduction

About This Document

If you are not a Precor certified servicer, you must not attempt to service any Precor Product. Call your dealer for service information.

WARNING: This service documentation is for use by Precor certified servicer providers only. Personal injury can result from electrical shock and/or mechanical moving parts.

This service manual applies to the SBK800 series model Spinner® Chrono[1]™ Power and Spinner® Climb™ indoor cycles. This document contains information required to service, repair, troubleshoot, and maintain the machines.

Indoor Cycle	Model	Feature Summary
Spinner® Chrono™ Power	SBK869	Magnetic braking, Self-powered, Direct Power Measurements (Watts), ASL[2], & Spinner® Chrono™ con-

[1]Spinner® Chrono™ Power bike.

[2]Active Status Light: Service and maintenance status light.

Indoor Cycle	Model	Feature Summary
		sole
Spinner® Climb™	SBK867	Magnetic braking & Spinning® Studio™ console

Additional Documentation

There is also an online web version if you have internet access at: Online Service Manual

See Also

"General Information" on page 3
"Safety Guidelines" on page 8
"Operation Verification" on page 9
"Adjustment Procedures" on page 12
"Replacement Procedures" on page 32

"Troubleshooting" on page 134
"Parts" on page 156

General Information

The following information provides general equipment and service information that will help you to use this manual to properly repair and maintain the bike.

Orientation Convention

The equipment orientation (front, right, left, back) used in manual is referenced to a user sitting on the equipment facing the handlebars.

Serial Numbers

Tools

Tools

Required service and repair tools:

- Metric Hex Key set (2.5 - 6 mm)[4]
- Spinner Bike Tool Kit (PPPFT0000007308000) [2]

- Torque[1] wrench 40 ft-lbs (54 N•m
- Metric Wrench set (10 - 21 mm)[4]
- Screw driver set
- AC[2]/DC[3] Adaoter (PPP000000012306104 or PPP000000012306103)[5]
- Magnetic Gap Fixture kit (PPP000000058248101)[3][4]
- Crank Extractor (X-Tools Crank Extractor)[1][4]
- Belt Tension Gauge (recommended Kent-Moore BT-33-73-F)

Notes:
[1] Required for pedal removal.
[2] The bike tool kit contains most of the specialized tools to repair the bike. (Does not include the magnetic gap fixture tool.)
[3] Required for magnetic brake pad adjustment.
[4] (Included in the Spinner Bike Tool Kit (PPPFT0000007308000).
[5] Mfg. Dates: 1/21/2019 & on, Required for manual Power (Wattts) calibration.procedure.

Specification Summary

This table provides a summary of system component specifications.

System Component	Specification
Pedal Torque	33 ft-lb (45 N•m)
Drive Belt Tension	60 +/- 5 lbs (27 */- 2 kgs)
Generator Belt Tension	1/2 in (1.3 cm) up/dwn travel
Stabilizer fastener Torque	15.6 ft-lbs (21 N•m)
Axle Nut Torque	29.5 ft-lbs (40 Nm)

.

Bolt Grade Identification

[1]Torque is a measure of the force that can cause an object to rotate about an axis. Bolt/nut example: 5 nM torque is equivalent to 5 newtons of force applied one meter from the center of the bolt, 6 ft-lb is equivalent to 6 lb of force applied 1 foot away from the center of the bolt.
[2]Alternating Current: electric current which periodically reverses direction between positive and negative polarity.
[3]Direct Current: electrical current that only flows in one direction.

Bolt grade markings are used to categorize bolts according to the bolt material, manufacturing process, and mechanical properties.The grade of the bolt is stamped on the head of the bolt.

US SAE bolts: The bolt grade markings are determined by the number of the lines stamped on the head of the bolt. The number of lines is always two less than the grade of the bolt. Count the lines, add two, and you can determine the grade of the bolt.

Metric bolts: On metric bolts, the bolt grade is identified by a bolt grade number stamped on the head of the bolt.

CAUTION: Always replace bolts with the same grade bolt. If you don't know the grade of the replacement bolt - DO NOT USE THE BOLT.

Bolt Grade Markings Chart

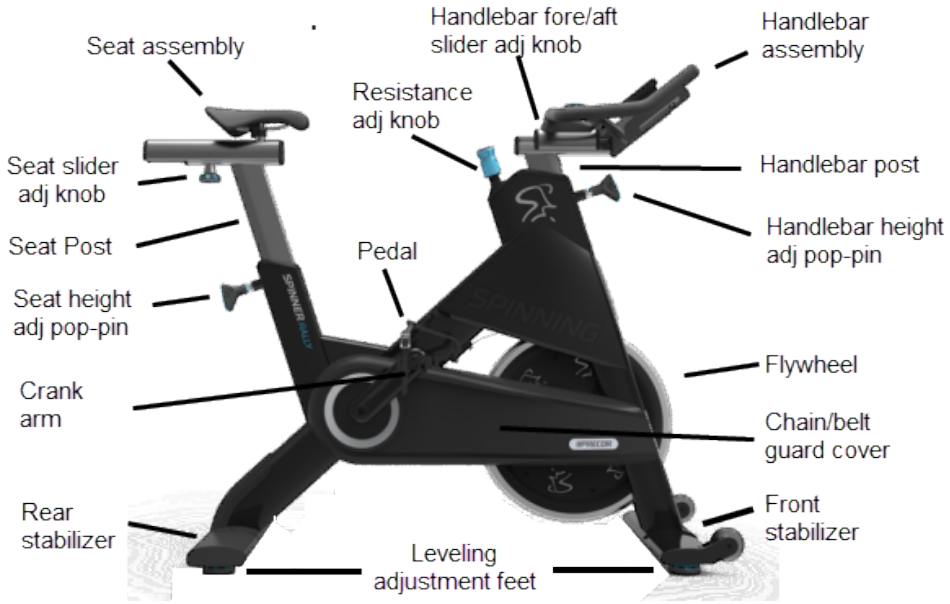
Example bolt grades used on Precor equipment (may not represent all bolt grades). Always match the replacement bolt grade marking to the removed bott grade marking.

GRADE	SAE BOLT LINES	BOLT MARKINGS Metric	SAE
Grade 2 Metric 5.8	No Redial Lines		
Grade 5 Metric 8.8	3 Radial lines		
Grade 8 Metric 10.9	6 Radial Lines		

Parts

IMPORTANT: Always purchase OEM replacement parts and hardware from Precor. If you use parts not approved by Precor, you could void the Precor Limited Warranty. Use of parts not approved by Precor may cause injury.

Major Assembly and Parts Location



Exploded View Diagram and Parts List

There is a copy of the parts *Exploded View Diagram* and *Parts Identification List* included in the "Parts" on page 156 chapter that you can use as a quick reference. It is recommended that you go to the servicer partners Precor Connect website to view the most current parts information including the *Exploded View Diagram* and *Parts Identification List*.

- Precor Connect Partner Website

Lubrication

Lubricants

Only use products from the following list of approved lubricants:

Lubricant	Description
Grease	Use only NLGI class 2 PTFE synthetic grade grease. Use of unapproved lub-

Lubricant	Description
	ricants may void the product warranty. Recommended brands (or equivalent): • Mobil 1® synthetic grease • Super Lube® with Teflon

CAUTION: Do not use petroleum based lubricants on mechanical components such as the lift, as this may result in degradation of nylon gearing mechanisms. Use only synthetic lubricants such as "Super Lube with Teflon" or "Mobile One Synthetic" grease (RED).

Cleaning

Cleaning

Only use the following approved cleaning products to safely clean and prevent damage to the machine surfaces.

Approved Cleaning Products:

- **General Equipment Surfaces**:
  - 1 part mild soap to 30 parts water (recommend Simple Green® cleaner or equivalent).
  - Athletic equipment cleaner, 9x7 pre-saturated wipes (ATHLETIX PRODUCTS).
  - Enivir O Safe oxygen enhanced cleaner or Enviro Safe glass and multitask cleaner concentrate.
- **Consoles and PVS**[1]: a diluted solution of one part 91% Isopropyl alcohol to one part water.

Cleaning Procedure

1. Wipe down equipment using a soft lint-free cloth using only the recommended cleaning solution. Always spray cleaning solution directly onto the cleaning cloth and not directly onto the equipment surface to avoid equipment damage due to excessive moisture.

CAUTION: Do not use acidic cleaners and do not spray directly onto the equipment surfaces.

2. Rinse surfaces using a clean lint-free cloth dampened with water only.
3. Then completely dry with another clean lint-free cloth.

[1] Personal Viewing System display.

Safety Guidelines

Safety guideline you need to know and follow:

- Read and follow all **Warning** notices to protect yourself from personal injury.
- Read and follow all **Caution** notices to prevent damage to the equipment.
- Read the owner's manual and follow all operating instructions.
- Operate the equipment on a solid, level surface.
- Visually check the equipment before beginning service or maintenance operations. If it is not completely assembled or is damaged in anyway, do not attempt to operate the equipment.
- Never place liquids on any part of the equipment while performing service.
- To prevent electrical shock, keep all electrical components away from water and other liquids.
- Do not use accessory attachments that are not recommended by the manufacturer- such attachments can cause injury.
- Do not stand or climb on the handlebars, display enclosure or cover.

When servicing the equipment:

- During service operations you will be very close to moving machinery and voltage bearing components:
  - Remove jewelry (especially from ears and neck),
  - Tie up long hair,
  - Remove neck ties, and
  - Do not wear loose clothing

See Also

"Notices and Safety" on page ii

"Safety Notices" on page ii

Operation Verification

About

Use the Operation Verification Checklist to verify the bike operation. Verify the bike operation at the completion of any maintenance procedure and when it is necessary to ensure that the bike is operating properly.

Operation Verification Checklist

- ☐ Do an overall visual inspection of the bike looking for any loose hardware and/or missing parts. .Repair and replace as needed.
- ☐ Verify that the bike sets level and is stable on the floor, see "Bike Leveling Adjustment" on page 30.
- ☐ Verify that the seat position is level and does not rotate or tilt. Tighten and adjust as needed.
- ☐ Verify that the seat height and forward/back adjustment work correctly.
  - Make sure that the seat post up/down movement is smooth and that the pop-pins lock at different positions. .
  - Make sure the forward/back slider movement is smooth and the adjustment knob locks the seat in position.
- ☐ Verify that the handlebar height and forward/back adjustment work correctly.
  - Make sure the handlebar post up/down movement is smooth and that the pop-pins lock at different positions.
  - Make sure the forward/back slider movement is smooth and the adjustment knob locks the handlebar in position.
- ☐ Set the resistance to minimum and pedal the bike at a moderate pace (55 rpm or greater), increase the resistance to maximum and return to zero resistance.
  - Verify that the resistance knob functions normally from min to max resistance.
  - Verify that there were no unusual noises from the brake pads or flywheel during operation.
  - Verify that at maximum resistance, the bike was very hard to pedal.
- ☐ Pedal the bike at a moderate pace (55 rpm or greater), stop pedaling and press down on the resistance knob. Verify that the flywheel immediately begins to slow and quickly stops.
- ☐ Power (Watts) measurement AutoCal verification:
  (Spinner® Chrono[1]™ Power only).
  - Set the resistance to minimum and pedal the bike at 55 rpm or greater.

[1] Spinner® Chrono™ Power bike.

IMPORTANT: The resistance must be set to minimum to correctly perform AutoCal.

- Stop pedaling and wait for the pedals to completely stop. Wait 10 seconds to allow the bike to complete the power measurement AutoCal function.
- While continuously pedaling the bike at 60 **RPM**, verify that the measured workout **WATTS** at minimum and maximum resistance levels is within specification.

Power (WATTS) specification

Resistance Level	Power (WATTS)
minimum	≤ 40 Watts @ 60 rpm
maximum	≥ 415 Watts @ 60 rpm

IMPORTANT: The bike must be AutoCal'd before making the WATTS measurement. Also, the bike must be continuously pedaled between the min and max resistance WATTS measurements. If the pedals stop, a new AutoCal may occur invalidating the measurements.

☐ Generator verification:
(Spinner® Chrono™ Power only).

- Pedal the bike at 60 **RPM**.
- Verify that the measured generator voltage (service menu **GEN VOLT**) and current output (service menu **GEN AMP**) is within specification.

Generator specification

Generator Spec	Power (WATTS)
Generator voltage (**GEN VOLT**)	approx: 9 Vac @ 60 rpm
Generator current (**GEN AMP**)	approx: 0.4 amps @ 60 rpm

☐ Error Log & ASL[1] verification:
(Spinner® Chrono™ Power only).

- Verify that there are no current active error codes, view the service menu **ERROR LOG**. If there are logged error codes, resolve them and clear the error log (service menu **CLEAR ERROR**
- Verify the ASL blue state (Some facilities may choose to switch the ASL function OFF, see **ASL SETUP**): Ride the bike and stop. Make sure that the console ASL state is steady blue. If not, resolve any issues and reset the ASL to blue state.

☐ Return to service
(Spinner® Chrono™ Power models only)

- Auto-cal the bike, set the resistance level to minimum, start pedaling greater than

[1] Active Status Light: Service and maintenance status light.

55 rpm and then stop pedaling. Wait for the pedals to stop and dismount the bike.

- If verification tests were successfully completed, return to service.

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Adjustment Procedures

About

Adjustment procedures provide you with the step-by-step adjustment instructions to bring systems and components into specification. Perform the adjustment procedures whenever a trouble symptom points to a particular component and after a major component is removed/replaced.

Available Adjustment Procedures

"Brake Pad Adjustment" on page 15

"Drive Belt Tension and Tracking Adjustment" on page 19

"Generator Belt Tension Adjustment" on page 27

"Bike Leveling Adjustment" on page 30

AutoCal

(Spinner® Chrono[1]™ Power bikes only)

AutoCal is an automatic power (WATTS) measurement calibration feature offered on Spinner® Chrono™ Power model bikes. To insure accurate power (WATTS) results, an AutoCal should be performed before starting a workout.

AutoCal removes strain gauge sensor and brake pad magnetic field errors from the Power measurement (WATTS) results. Items you should know to perform a good AutoCal:

- AutoCal is performed every time the pedals stop moving for more than 3-5 seconds.
- The resistance must be completely removed (resistance knob turned fully counterclockwise) while AutoCal is being performed.
- The brake pads must be correctly gaped to achieve a good AutoCal, see "Brake Pad Adjustment" on page 15.

Two use cases that can cause a bad AutoCal

There are two common use cases that can inadvertently cause an inaccurate AutoCal:

- Exerciser momentarily stops and starts pedaling during a workout.
  Momentarily stopping and starting the pedals during a workout for more than 3-5 seconds will start a new AutoCal. If the resistance was not set to minimum, the AutoCal will be bad resulting in inaccurate power WATTS measurements.
- An exerciser quits a workout and dismounts the bike without setting the resistance level to minimum.
  In this case the bike will perform an inaccurate AutoCal because the resistance was not set to minimum. The new exerciser will read inaccurate power WATTS results unless a new AutoCal is performed with the resistance set to minimum.

Procedure

Review entire procedure before starting.

3. Set the resistance level to minimum (resistance knob turned fully counterclockwise):
4. Start pedaling the bike at 55 rpm or greater, then slow down and allow the pedals to stop. When the pedals and flywheel stop, the bike will perform the power measurement AutoCal. Wait a minimum of 10 seconds for the AutoCal to complete

IMPORTANT: The resistance knob must be set to the minimum resistance level to correctly perform the AutoCal function. The WATTS parameter will be incorrectly computed if the resistance knob is not set to minimum resistance level during AutoCal.

[1]Spinner® Chrono™ Power bike.

5. Verify the measured WATTS at minimum and maximum resistance levels:
   a. Set the resistance to minimum.
   b. Start pedaling and maintain the speed at 60 rpm as reported on the console **RPM** indicator. While continuously pedaling, verify the measured **WATTS** at minimum and maximum resistance levels. Continuously pedal between measurements.

Power (WATTS) specification

Resistance Level	Power (WATTS)
minimum	≤ 40 Watts @ 60 rpm
maximum	≥ 415 Watts @ 60 rpm

IMPORTANT: The bike must be AutoCal'd before making the WATTS measurement. Also, the bike must be continuously pedaled between the min and max resistance WATTS measurements. If the pedals stop, a new AutoCal may occur invalidating the measurements.

9. Verify the bike operation per and return to service.

Brake Pad Adjustment

This procedure provides instruction to adjust the Magnetic Brake Pads.

The brake pad-flywheel gap must be correctly set to insure proper resistance level, AutoCal, and power measurement (watts).

Perform the brake pad adjustment any time the brake pads are replaced or any condition were the resistance is not performing correctly or the power measurement is not being correctly computed.

Strong magnetic force

The brake pads have a very strong magnetic force and attraction to the flywheel or any ferromagnetic metal object. . The brake pads can easily be ripped from your grasp and snap against the metal object damaging the pad. Be very careful to hold the brake pads tightly when in close proximity to the flywheel during the brake pad removal and installation procedures.

CAUTION: The magnetic force of the brake pad is very strong and when in close proximity to the flywheel (or any metal object) will quickly snap the pad against the flywheel (or other metal) object causing damage to the brake pad magnets. Firmly hold the magnetic brake pads during removal/installation procedures to avoid damaging the brake pads.

Specialized Tools

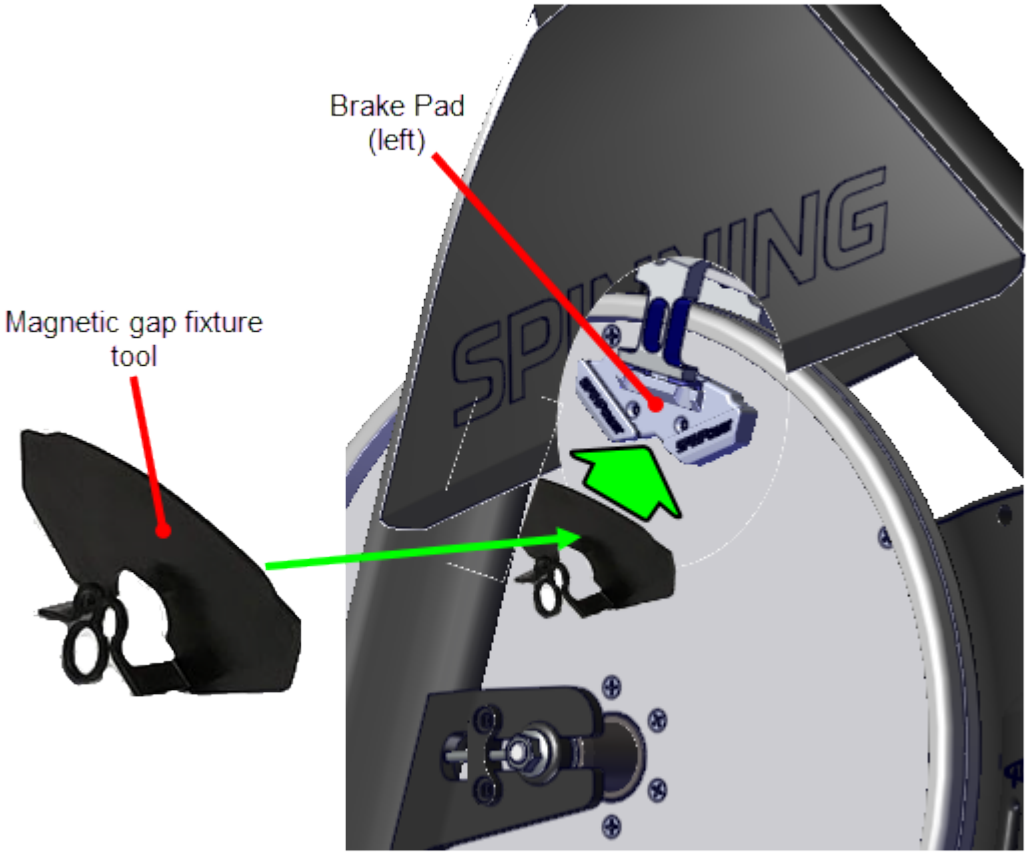
Tool		Part Number	Qty
Magnetic Gap Fixture kit*		PPP000000058248101	1*
Note: * Each Magnetic Gap Fixture kit contains two (2x) Magnetic Gap Fixture tools. Only one kit is required to complete the brake pad adjustment.			

Procedure

Review entire procedure before starting.

1. Loosen the resistance knob enough to allow the installation of the magnetic gap fixture tool.
2. Mount a magnetic gap fixture (2x) onto both the left and right brake pads. Slip the back of the magnetic gap fixture into the gap between the brake magnetic pad and the fly-

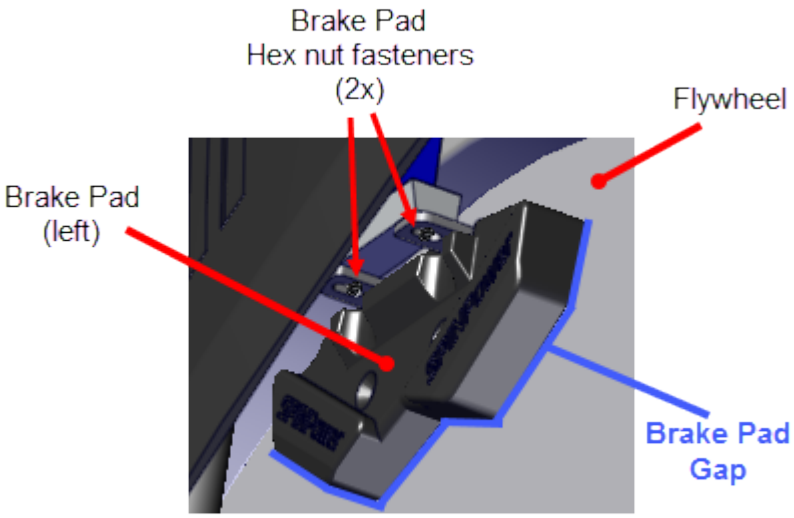
wheel surface. Continue sliding the fixture over the brake pad and press into position.



Installing the Brake Pad Fixture

Note: It is recommended that a magnetic gap fixture (2x) be mounted on both the left and right brake pads before starting and while performing the brake pad gap adjustment procedure.

3. loosen, but do not remove, the left and right brake pad 3 mm hex key mounting bolts (2x per pad).



Brake Pad Gap Adjustment

4. Apply maximum resistance, fully turn the resistance knob in the clockwise (+) direction.
5. Adjust the left and right brake pads so that the magnetic gap fixture tool touches the flywheel surface. Then fully tighten the 3 mm hex key fasteners (2x per pad).
6. Loosen the resistance and remove the magnetic gap fixture tools from the left and right brake pads.
7. Verify resistance operation:
    a. Turn the resistance knob to minimum resistance.
    b. Start pedaling the bike at 60 rpm or greater while increasing the resistance level to maximum and returning to minimum resistance. Stop pedaling and allow the flywheel to stop:
        - Verify that changing the resistance level from minimum to maximum and back to minimum was smooth and that there were no issues with the resistance knob or caliper assembly.
        - Verify that at maximum resistance, the pedal resistance was very strong (If possible, compare with a similar bike in known good operating condition).
        - Verify that there were no unusual noises from the brake pads during this operation.
8. Verify the power (watts) measurement:
    (Spinner® Chrono[1]™ Power model only)

[1]Spinner® Chrono™ Power bike.

a. Auto-cal the bike:
   - Set the resistance to minimum.
   - Start pedaling the bike at 55 rpm or greater, then slow down and allow the pedals to stop. When the flywheel stops, the bike will perform the power measurement AutoCal. Wait a minimum of 10 seconds for the AutoCal to complete.

IMPORTANT: The resistance knob must be set to the minimum resistance level to correctly perform the AutoCal function. The WATTS parameter will be incorrectly computed if the resistance knob is not set to minimum resistance level during AutoCal.

b. Verify the measured WATTS at minimum and maximum resistance levels:
   - Set the resistance to minimum.
   - Start pedaling and maintain the speed at 60 rpm as reported on the console **RPM**. While continuously pedaling, verify the measured **WATTS** is within spec at the minimum and maximum resistance levels. Continuously pedal between measurements.

Power (WATTS) specification

Resistance Level	Power (WATTS)
minimum	≤ 40 Watts @ 60 rpm
maximum	≥ 415 Watts @ 60 rpm

IMPORTANT: The bike must be AutoCal'd before making the WATTS measurement. Also, the bike must be continuously pedaled between the min and max resistance WATTS measurements. If the pedals stop, a new AutoCal may occur invalidating the measurements.

9. While riding the bike at 60 rpm, stop pedaling and firmly press down the resistance knob. Verify that the flywheel immediately slows down and stops rotating.
10. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

See Also

"Adjustment Procedures" on page 12

Drive Belt Tension and Tracking Adjustment

About

This procedure provides instruction to verify and make adjustments to the drive belt tension and tracking. The belt tension and tracking should be verified anytime the flywheel is removed, the belt is replaced, at regularly scheduled preventative maintenance, or when there are any unusual belt related issues (noises, pedal skip, fraying, etc.) while operating the bike.

CAUTION: Improper belt tension and tracking adjustment will cause premature wear and may void the Precor Limited Warranty.

Specifications

System Component	Specification
Belt Drive Tension	60 +/- 5 lbs (27 */- 2 kgs)
Axle Nut torque	29.5 ft-lbs (40 Nm)

Specialized Tools

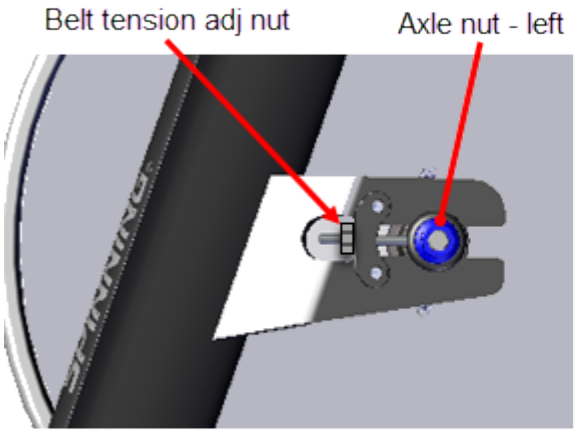
Tool	Part Number
Belt Tension gauge	Belt Tension Gauge (recommended Kent-Moore BT-33-73-F)

Procedure

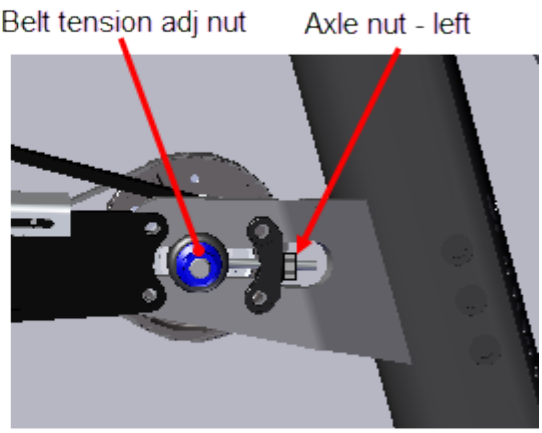
Review entire procedure before starting.

Belt Tension adjustment

1. Remove the front and rear drive belt covers, see "Belt Guard Cover Replacement" on page 38.
2. Remove all brake resistance by turning the resistance knob counter clockwise (-).
3. Loosen the left and right 17 mm axle nuts enough to allow flywheel axle movement. Do not fully remove the axle nuts.

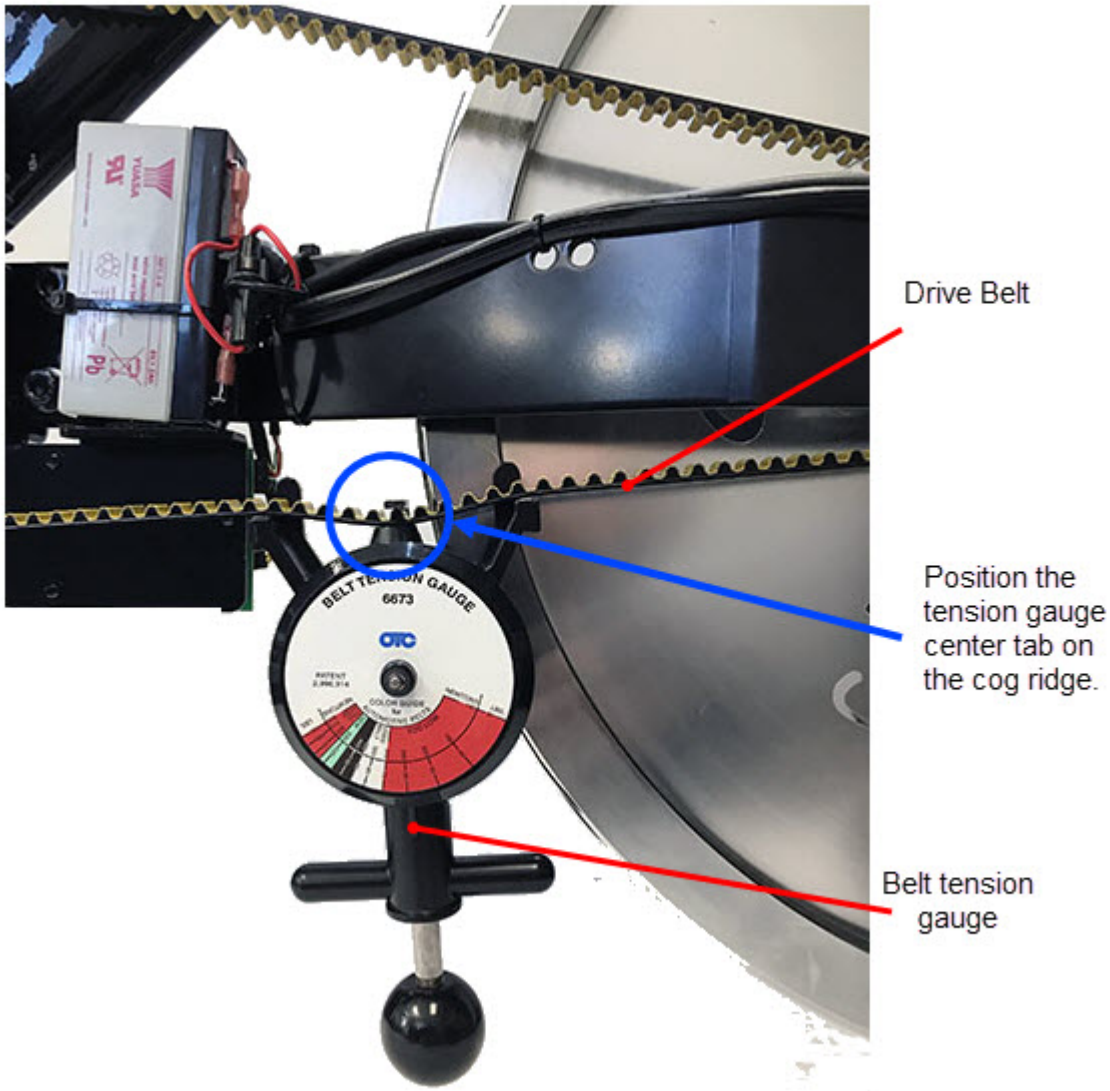


LEFT SIDE

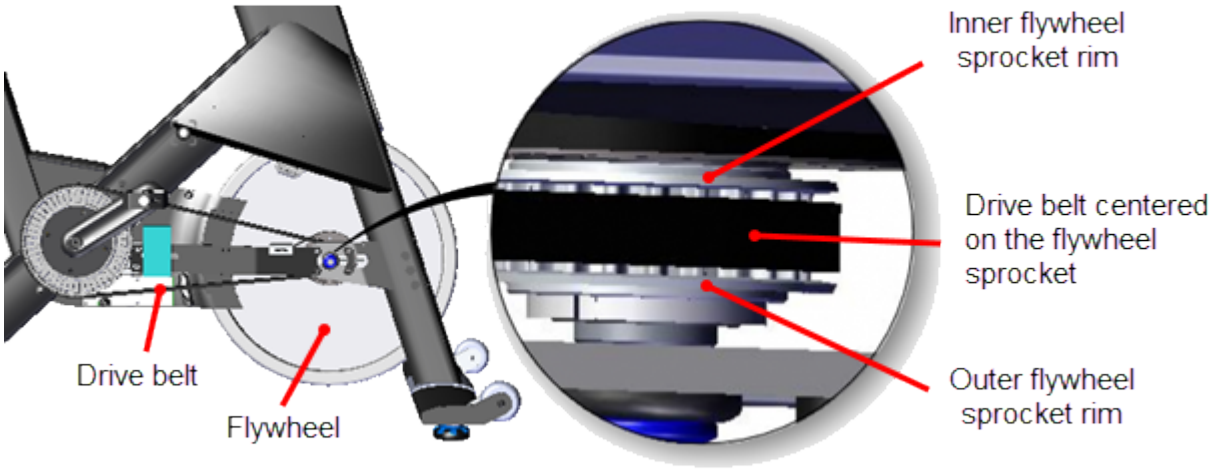


RIGHT SIDE

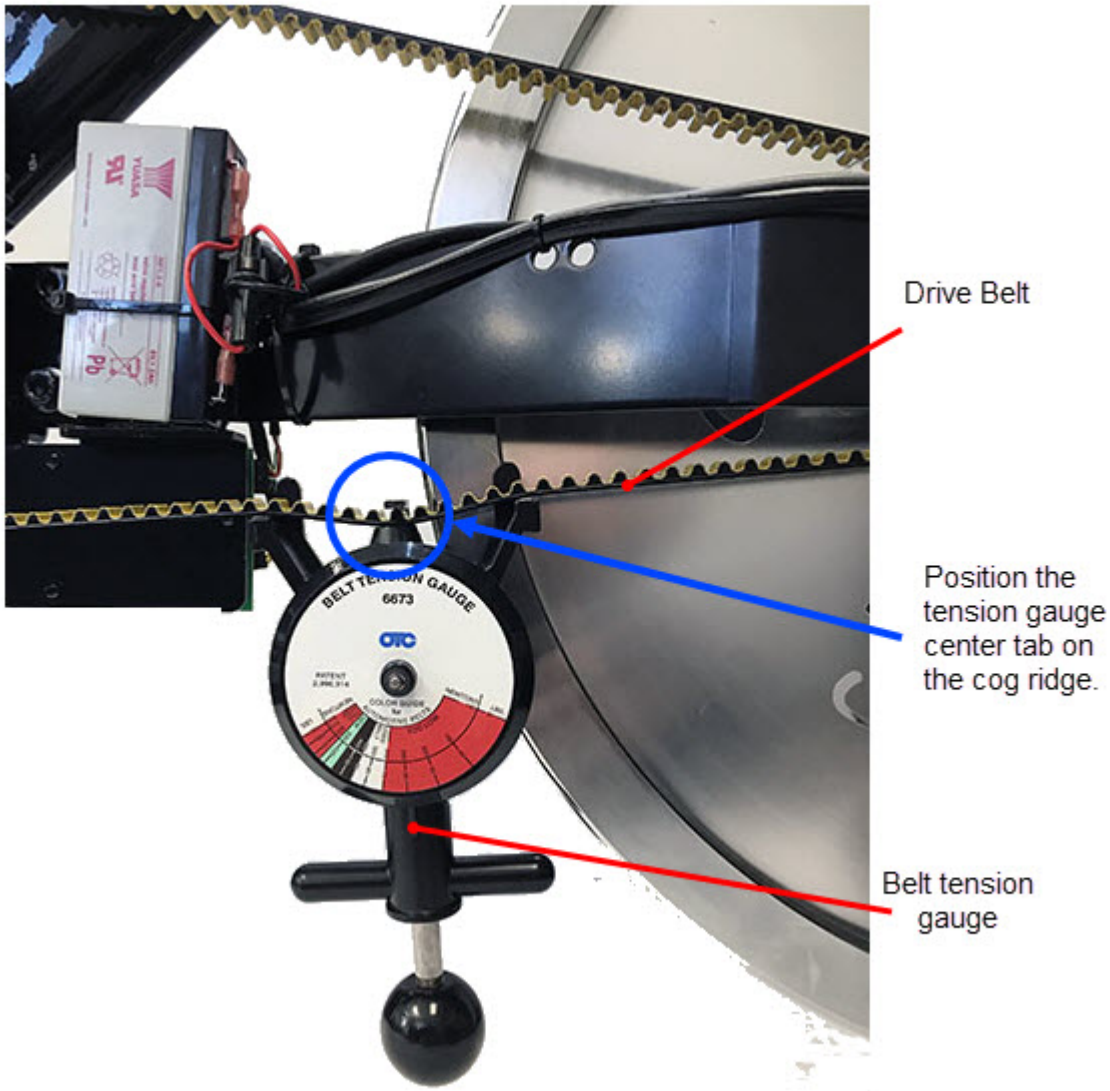
4. Place the belt tension gauge on the drive belt midway between the front and rear sprockets. Position the tension gauge so that the center tension tab rests on the belt tooth ridge and not in the gap between the teeth. Read and record the measured belt tension.
   a. If the measured tension is within the specification limits 60 +/- 5 lbs (27 */- 2 kgs), remove the tension gauge and verify the belt tracking, go to "Belt tracking adjustment" on page 24.
   b. If the measured tension is not within spec, remove the tension gauge and continue the belt tension adjustment.



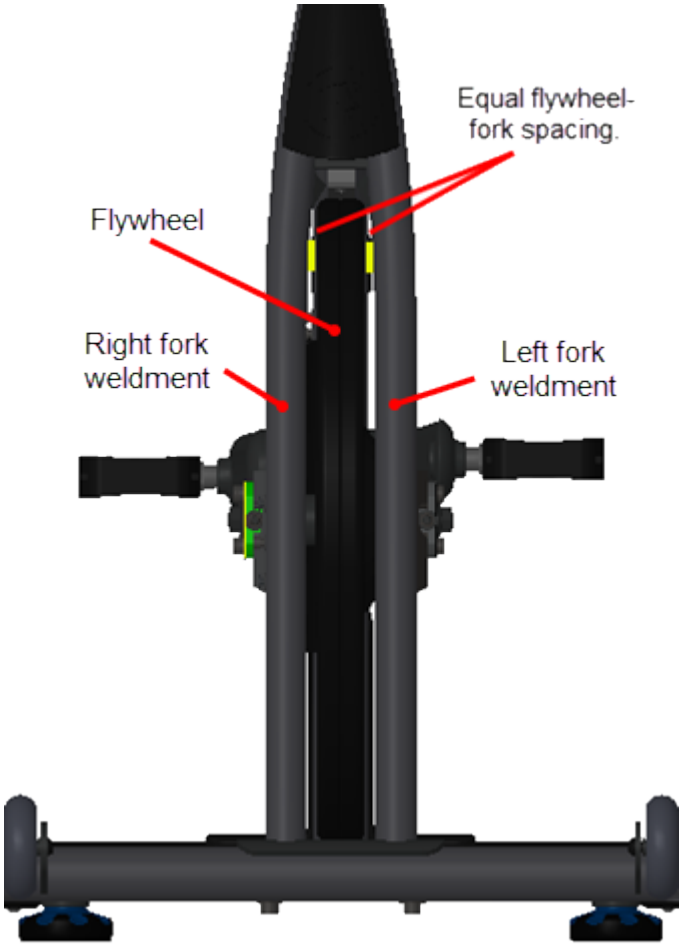
5. If the belt is under tension, remove the belt tension by alternately loosening the right and left 10 mm hex key belt tension adjustment nuts. Keep a small amount of belt tension so that the belt remains seated on the front and rear sprockets.
6. If the drive belt is not centered on the flywheel pulley, slowly turn the pedals while nudging the belt to the center of the sprocket.



7. Place the belt tension gauge on the drive belt midway between the front and rear sprockets Position the tension gauge so that the center tension tab rests on the belt tooth ridge and not in the gap between the teeth.



8. Incrementally and alternately tighten the left and right tension adjustment nuts so that the flywheel remains centered between the left and right fork weldments. Continue the adjustment process until the belt tension gauge reads, 60 +/- 5 lbs (27 */- 2 kgs).

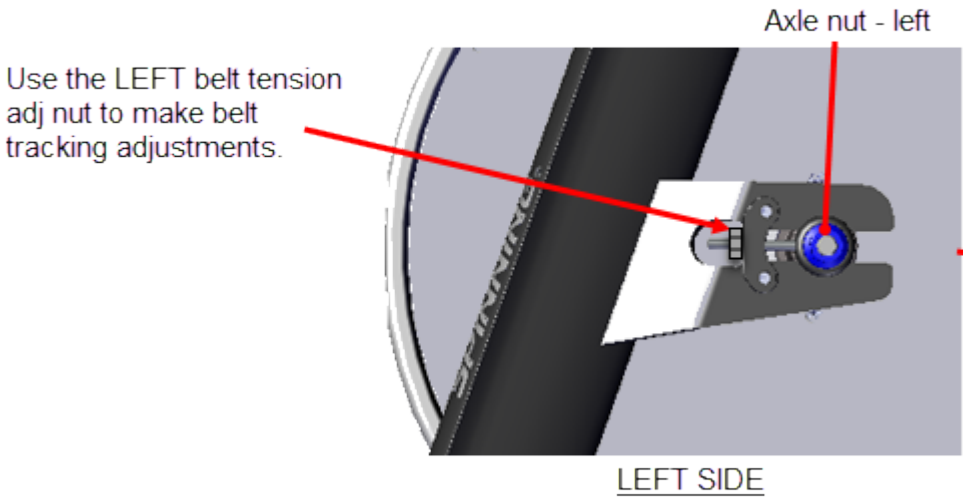


9. Remove the tension gauge. Then hand turn the crank to break-in the belt. Stop the belt, place the tension gauge onto the belt and remeasure the belt tension. Make sure the belt tension remains in spec 60 +/- 5 lbs (27 */- 2 kgs). Readjust the tension if out-of-spec.
10. Verify the belt tracking, go to "Belt tracking adjustment" below.
    .

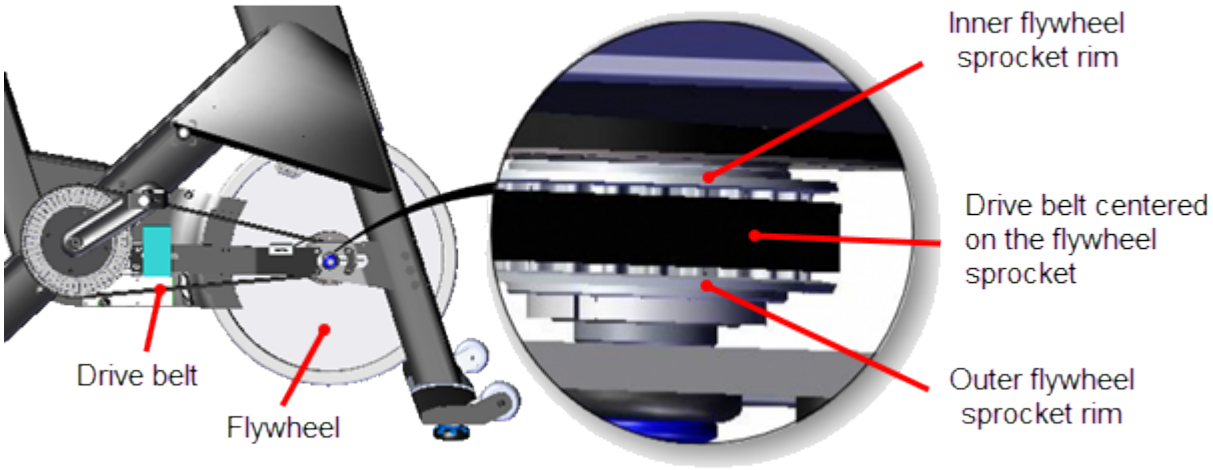
Belt tracking adjustment

The drive belt tracking does not need to remain perfectly centered on the pulley. The belt is correctly tracking when the belt edges do not rub against either the left or right flywheel pulley rims during use.

Note: Always use the LEFT belt tension adjustment bolt to make belt tracking adjustments.



1. Hand rotate the pedals and verify that the drive belt does not track either the left or right so that it rubs against the flywheel pulley left (inner) or right (outer) rims. If the drive belt rubs against the pulley inner or outer rims, adjust the tracking alignment to correct the issue:
    a. If the belt is tracking to the left causing the belt to rub against the inner rim of the pulley, adjust the belt to track to the right and remain centered on the pulley. While rotating the pedals, loosen the LEFT adjustment nut in 1/8 counter-clock-wise increments until the belt moves towards the center and no longer rubs against the pulley inner rim.
    If the belt moves past the pulley center, slightly tighten (turn clockwise) the LEFT adjustment nut to recenter the belt.
    Continue this process until the belt no longer rubs against either the inner or outer pulley rims.
    b. If the belt is tracking to the right causing the belt to rub against the outer rim of the pulley, adjust the belt to track to the left and remain centered on the pulley. While rotating the pedals, tighten the LEFT adjustment nut in 1/8 clockwise increments until the belt moves towards the center and no longer rubs against the sprocket outer rim.
    If the belt moves past the sprocket center, slightly loosen (turn counter-clockwise) the LEFT adjustment nut to recenter the belt.
    Continue this process until the belt no longer rubs against either the inner or outer sprocket rim.



CAUTION: Damage to the belt edges and unusual noises will occur if the belt is not properly aligned and is rubbing against the sprocket inner or outer rims.

2. Tighten the left and right axle nuts, torque to 29.5 ft-lbs (40 Nm).
3. Ride and pedal the bike at high speed for several minutes Verify that there were no tracking issues while riding the bike.
4. Stop the pedals, dismount the bike and verify that the belt tension and tracking remain within specification:
    a. Remeasure the belt tension and verify that it remains within spec 60 +/- 5 lbs (27 */- 2 kgs). Readjust if out-of-spec.
    b. Inspect the drive belt tracking and make sure the belt is not rubbing against the inner or outer sprocket rims. Readjust if out-of-spec.
5. Reinstall the front and rear drive belt covers, see "Belt Guard Cover Replacement" on page 38.
6. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

See Also

"Adjustment Procedures" on page 12

Generator Belt Tension Adjustment

Applies To: (Spinner® Chrono[1]™ Power models only)

About

This procedure provides instruction to verify and make adjustments to the Generator belt tension. The belt tension should be verified anytime the flywheel is removed, the belt is replaced, at regularly scheduled preventative maintenance, or when there are any unusual belt related issues (noises, low charging voltages, etc.) while operating the bike.

CAUTION: Improper belt tension adjustment will cause premature wear and may void the Precor Limited Warranty.

Specifications

System Component	Specification
Generator Drive Tension	1/2 in (1.3 cm) up/dwn travel

Procedure

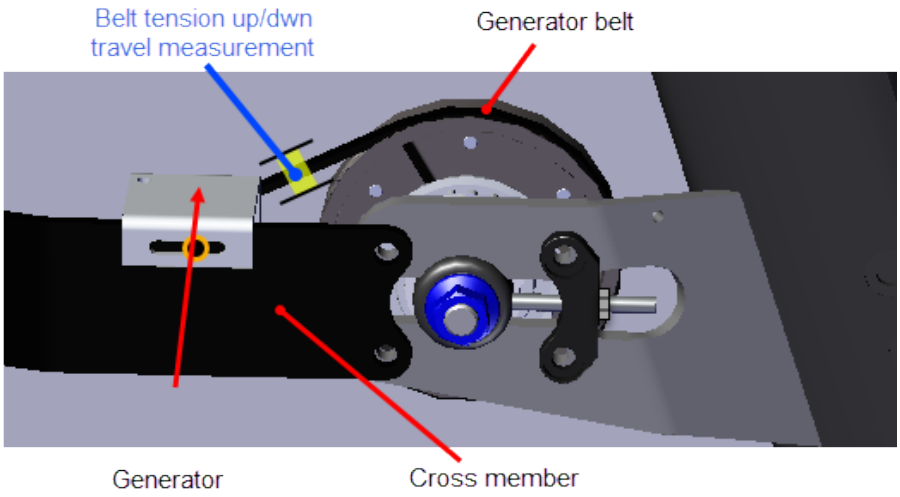
Review entire procedure before starting.

1. Remove the front and rear drive belt covers, see "Belt Guard Cover Replacement" on page 38.
2. Remove all brake resistance by turning the resistance knob counter clockwise (-).

   Belt tension check

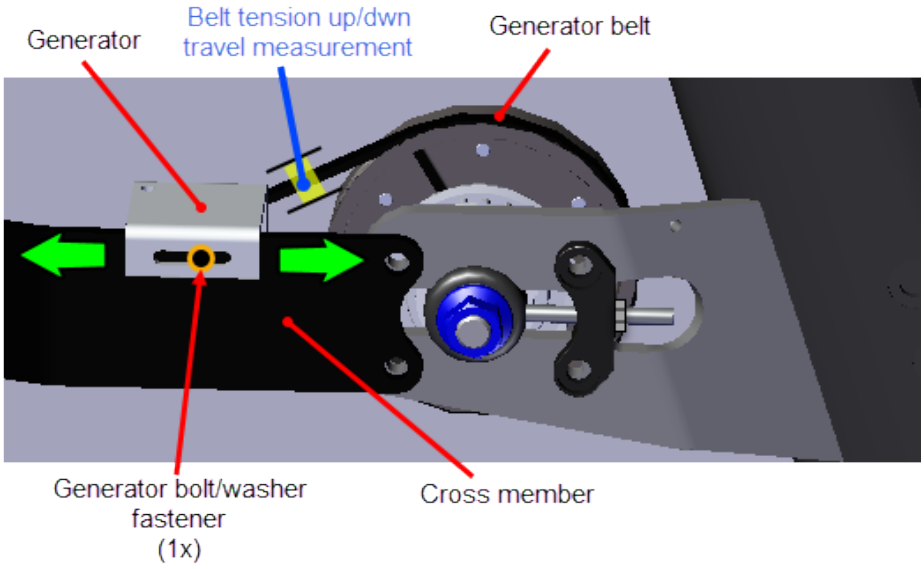
3. Measure the belt tension up/down travel.by positioning a ruler next the belt edge while firmly pressing down and releasing the belt. The belt up/down travel should be within 1/2 in (1.3 cm) up/dwn travel
   a. If the belt tension is within spec., tension adjustment is not required.
   b. If the belt is not within spec., continue belt tension adjustment.

[1]Spinner® Chrono™ Power bike.



Belt tension adjustment

4. Loosen the generator 4 mm hex key mounting bolt enough so that the generator can be moved forward and rearward. Do not remove the mounting bolt.



5. Slowly hand rotate the pedals and make sure the belt is correctly seated on the generator and flywheel generator pulleys.
6. Adjust the belt tension by sliding the generator forward or rearward as needed so that there is 1/2 in (1.3 cm) up/dwn travel. Measure the belt travel.by positioning a ruler next the belt edge and measuring the belt down travel distance while firmly pressing down on the belt (The belt should be tensioned to half the full up/down travel spec distance).

CAUTION: Do not over tension the belt which will lead to premature belt wear and possible damage to the generator pulley.

7. Fully tighten the 4 mm generator mounting bracket bolt.
8. Ride and pedal the bike at high speed for several minutes and verify there are no issues with the belt (unusual noised etc.).
9. Slow down and stop the pedals and flywheel. Verify that the belt tension travel remains at 1/2 in (1.3 cm) up/dwn travel.
10. Reinstall the front and rear drive belt covers, see "Belt Guard Cover Replacement" on page 38.
11. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

See Also

"Adjustment Procedures" on page 12

Bike Leveling Adjustment

Use this procedure to level the bike. Make sure the bike is level and sits firmly on the floor before allowing anyone to use the bike.

> ***IMPORTANT***: Place the unit on a flat surface. Rotating the adjustable feet does not compensate for extremely uneven surfaces.

Leveling the bike

1. Tighten all four leveling feet to fully lower the bike.

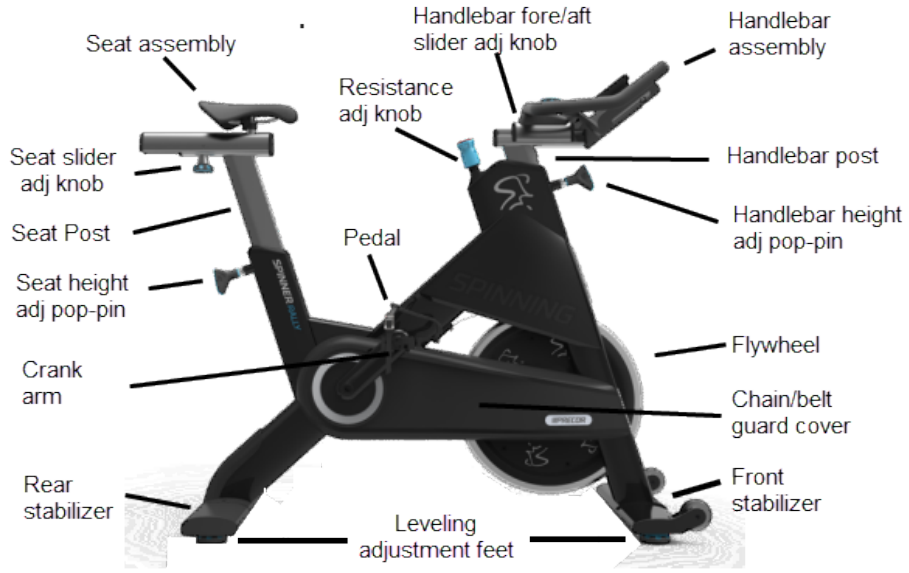
2. Push on the bike and try to rock the bike. If there is any movement make foot adjustments as needed to stabilize the bike. Turn the leveling feet clockwise (+) to lower the bike or counterclockwise (-) to raise the bike.
3. Test ride the bike at slow and high speed verifying that the bike remained stable while pedaling.
4. Dismount the bike and recheck for stability, readjust the feet as necessary to stabilize the bike.

See Also

"Adjustment Procedures" on page 12

Replacement Procedures

Replacement procedures provide you with the step-by-step instructions to remove and replace system components.



Replacement Procedures

"Battery Replacement" on page 34

"Belt Guard Cover Replacement" on page 38

"Brake Pad Replacement" on page 43

"Brake Caliper Assembly Replacement" on page 48

"Drive Belt, Generator Belt, and Flywheel Replacement" on page 75

"Drive Belt, Generator Belt, and Flywheel Replacement" on page 75

"Drive Belt, Generator Belt, and Flywheel Replacement" on page 75

"Drive Belt, Generator Belt, and Flywheel Replacement" on page 75

"Generator Assembly Replacement" on page 88

"Handlebar Assembly Replacement" on page 91

"Handlebar Adjustment Knob Replacement" on page 95

"LPCA board Replacement" on page 103

"Pedal Replacement" on page 112

"Crank Arm Replacement" on page 117

"Resistance Knob Replacement" on page 120

"Seat Assembly Replacement" on page 125

"Stabilizer Replacement" on page 127

See Also

"Brake Pad Adjustment" on page 15

"Drive Belt Tension and Tracking Adjustment" on page 19

"Generator Belt Tension Adjustment" on page 27

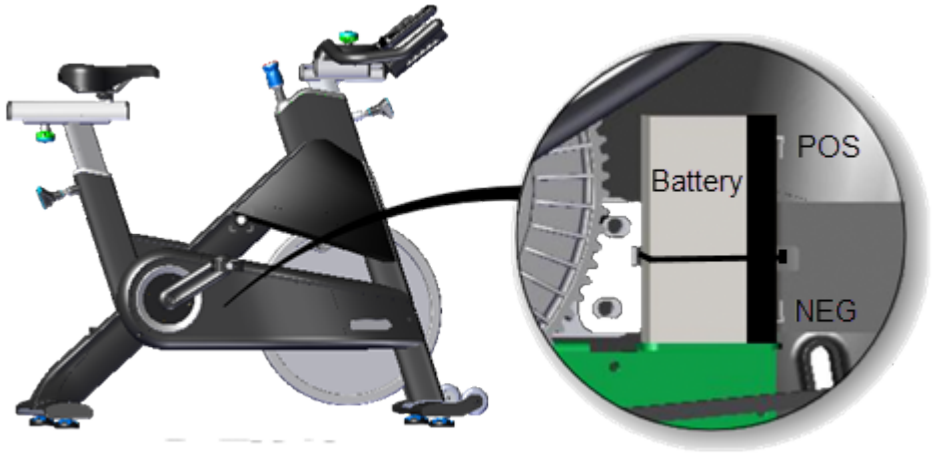
"Bike Leveling Adjustment" on page 30

Battery Replacement

(Spinner® Chrono[1]™ Power models only)

About

This procedure provides instruction to determine the condition of the battery and replacement procedure.



Specifications

Battery Voltage	Specification
Battery Specification	6 VDC, 1.2 AH
GOOD battery state*	5.8 - 6.6 VDC*
LOW battery state*	5.5 - 5.7 VDC*
Console OFF state*	< 5.4 VDC*
Charging voltage (while pedaling)	7.5 VDC max
Note: * static voltage measurements: no pedal movement and no power adapter connected.	

Determining the battery condition

If the measured voltage is below 5.5 Vdc, charge the battery by pedaling greater than 55 rpm (or using an optional battery adapter) until the battery static (non-pedaling) voltage level

[1]Spinner® Chrono™ Power bike.

reaches 5.8 to 6 Vdc.

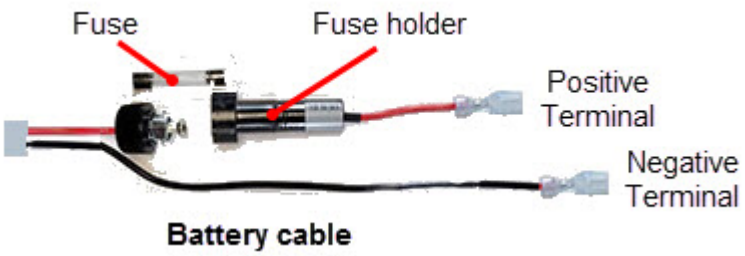
If the static battery voltage will not charge to and remain at 5.8 - 6 Vdc:

1. While pedaling the bike, make sure the battery charging voltage is greater than 6 Vdc (7.5 Vdc max). Access the console service test menu, select the **BAT VOLT** parameter to read the battery charging voltage, see "Spinner® Chrono™ Console" on page 161.
2. Stop pedaling the bike and verify that the battery voltage remains ≥ 5.8 Vdc. If not, replace the battery. If the battery does not remain ≥ 5.5 Vdc after a few hours with no pedaling, replace the battery

Battery Fuse

The inline battery fuse is part of the battery assembly cable red wire connected to the battery positive terminal. To remove the fuse, open the fuse holder by twisting the fuse holder top cap and removing the fuse.

Fuse specification: Inline fuse, 5 amp/250 Vdc



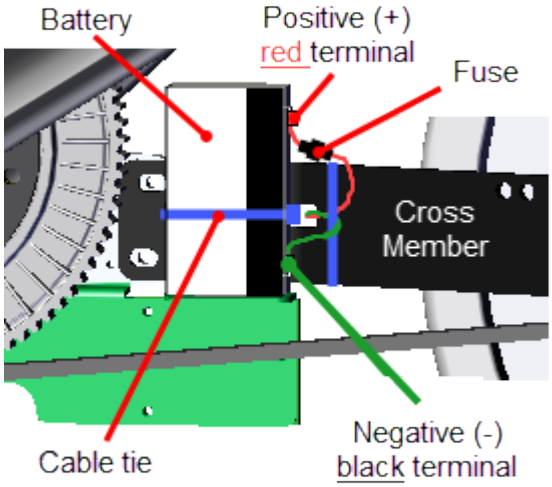
Battery cable

Procedure

Review entire procedure before starting.

Removal procedure

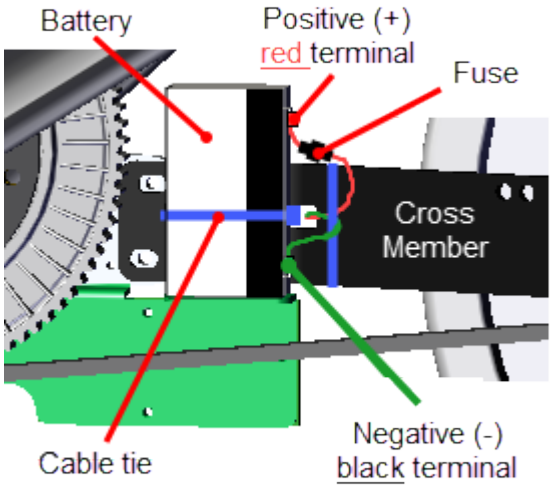
1. Remove the front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38.
2. Determine the battery condition, see "Determining the battery condition" on the previous page .
3. Carefully disconnect the battery cable Black wire from the Negative (-) battery terminal and then the Red wire from the Positive (+) battery terminal. Disconnect the battery Negative (-) terminal wire first:



4. Cut the cable tie that is securing the battery to the cross member and remove the battery.

Installation procedure.

1. Place the battery on the cross member and secure with an 8" cable tie.



2. Carefully reconnect the battery cable Red wire to the Positive (+) battery terminal and then the Black wire to the Negative (-) battery terminal. Reconnect the Negative terminal cable last.
3. Slowly pedal the bike enough to power ON the console, access the console service test menu **BAT VOLT** parameter (see "Spinner® Chrono™ Console" on page 161). Continue pedaling and verify that the battery voltage is between 6.0 - 7.5 Vdc, then stop

pedaling and verify that the voltage remains ≥ 5.8 Vdc. If the battery voltage is low, start pedaling faster than 55 rpm to charge the battery until the non-pedaling voltage remains at ≥ 6 Vdc (a new battery may need to be charged.).

4. Replace the front and then rear belt guard covers, see "Belt Guard Cover Replacement" on the next page.
5. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

.See Also

"Replacement Procedures" on page 32

Belt Guard Cover Replacement

About

This procedure provides instruction to remove and install the front and rear Belt Guard Covers.

The front belt guard cover includes an access panel used to access the right tensioner nut and axle nut. It is easiest to remove the rear guard cover first and then the front guard cover, install in reverse order. All rear guard fasteners must be removed before the front guard can be removed.

Available Movies

(Internet Only)

belt Guard Cover Replacement

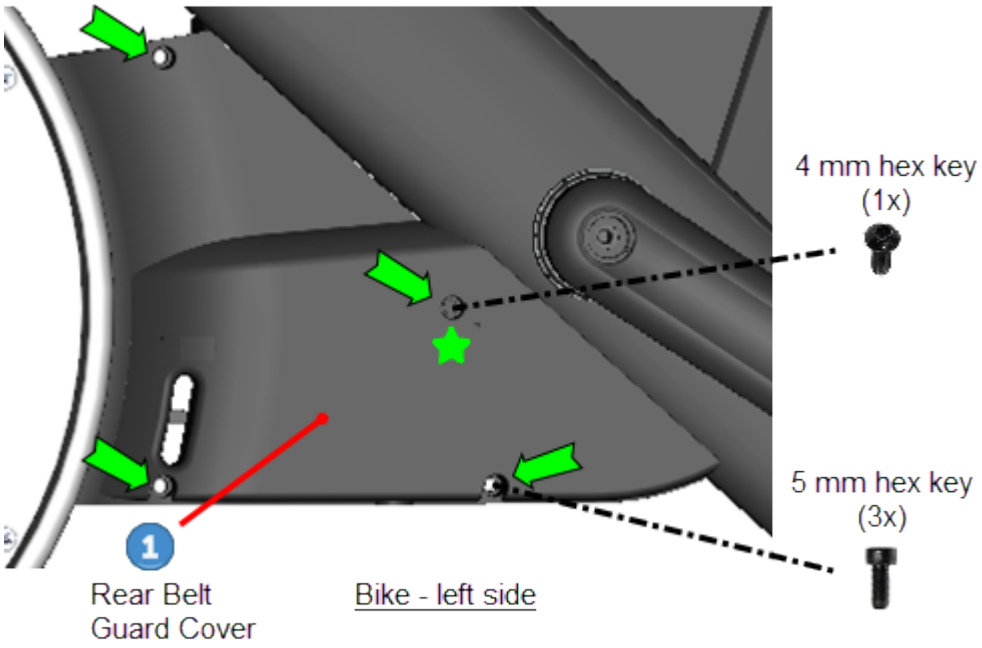
Procedure

Review entire procedure before starting.

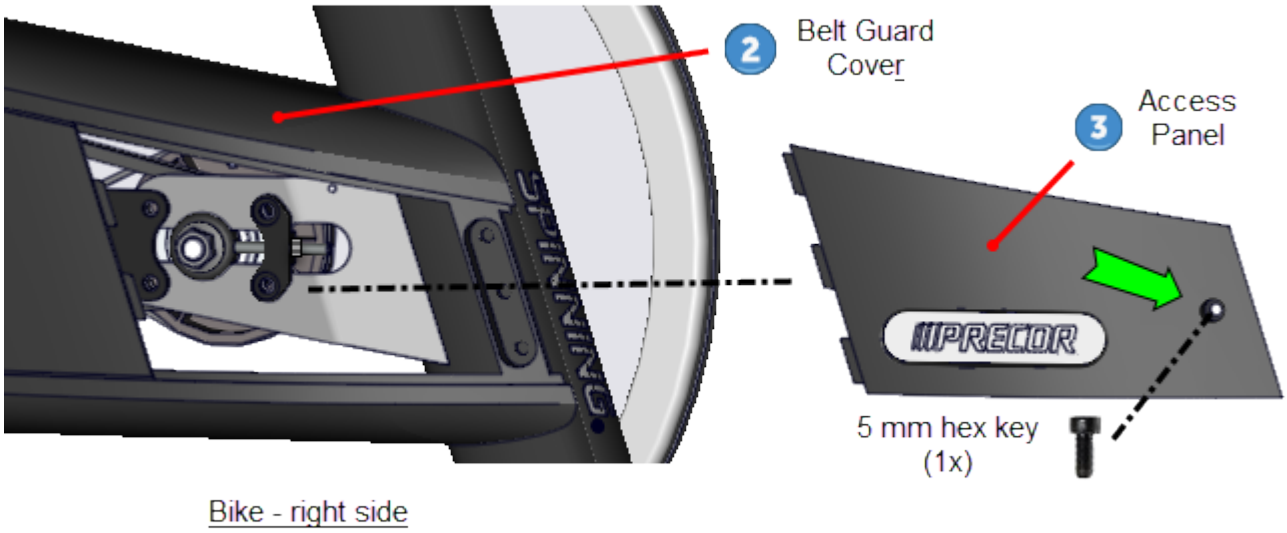
Removal instructions

1. Remove the rear (left side) belt guard cover 1 by removing the three outer 5 mm hex key fasteners (3x) and then the center 4 mm fastener (1x). Remove center 4 mm

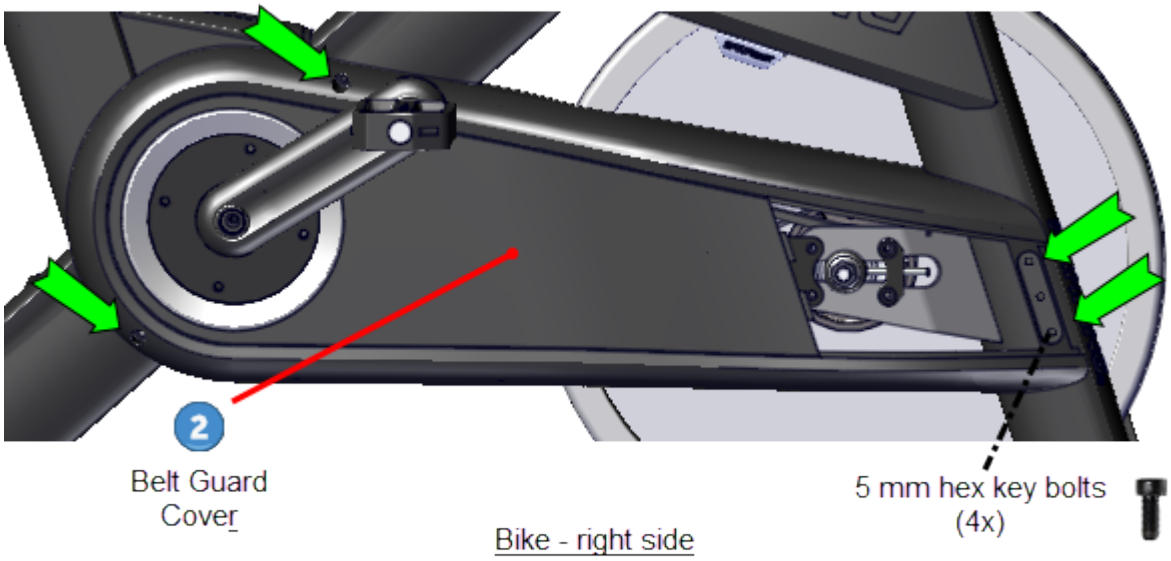
hex key fastener last. Retain part(s) and/or fastener(s) for installation.



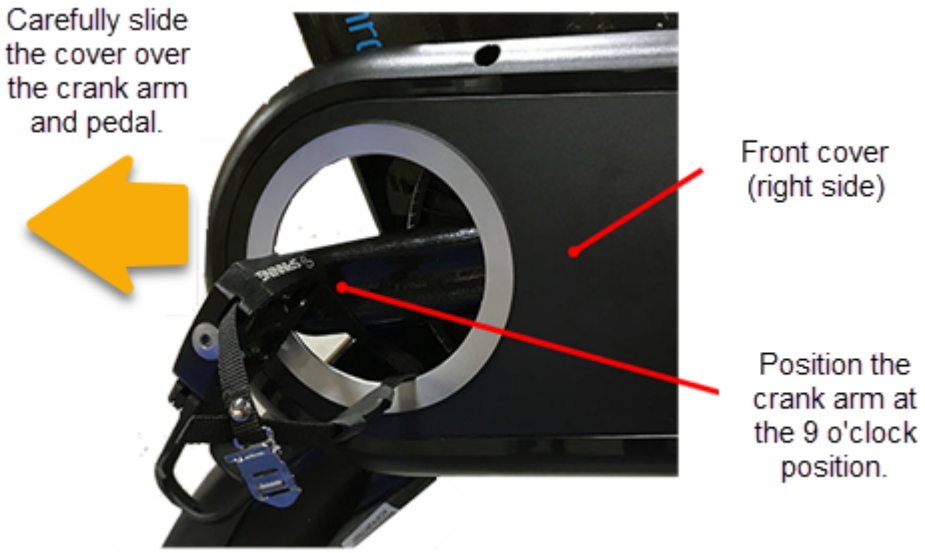
2. Remove the front belt guard access panel 3 by removing the one fastener using a 5 mm hex key. Retain part(s) and/or fastener(s) for installation.



3. Remove the front belt guard cover 2 by removing the 5 mm hex key (4x) fasteners. The 4 mm hex key center back cover bolt needs to also be removed to remove the front cover. Retain part(s) and/or fastener(s) for installation.

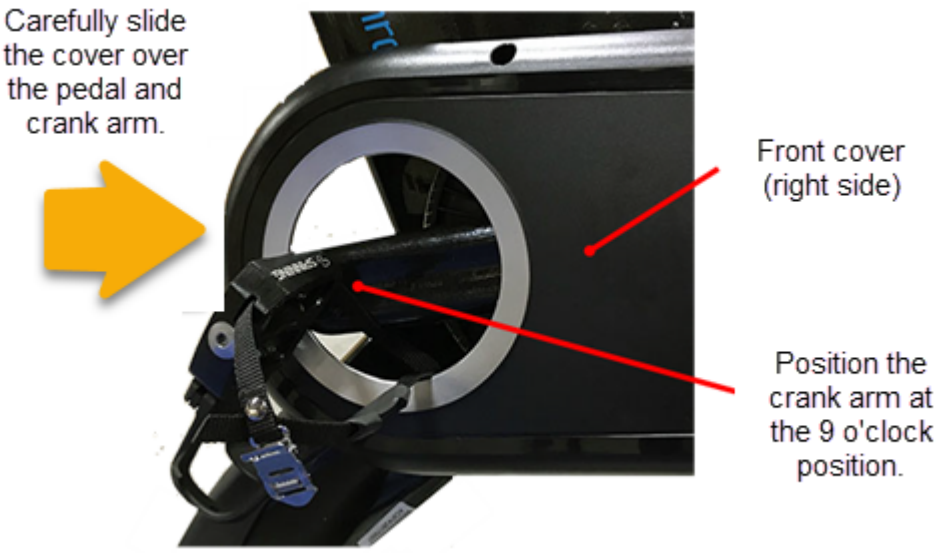


4. Position the crank arm to the 9 o'clock position and then carefuly slide the front cover over the crank arm and pedal to remove. Retain part(s) and/or fastener(s) for installation.

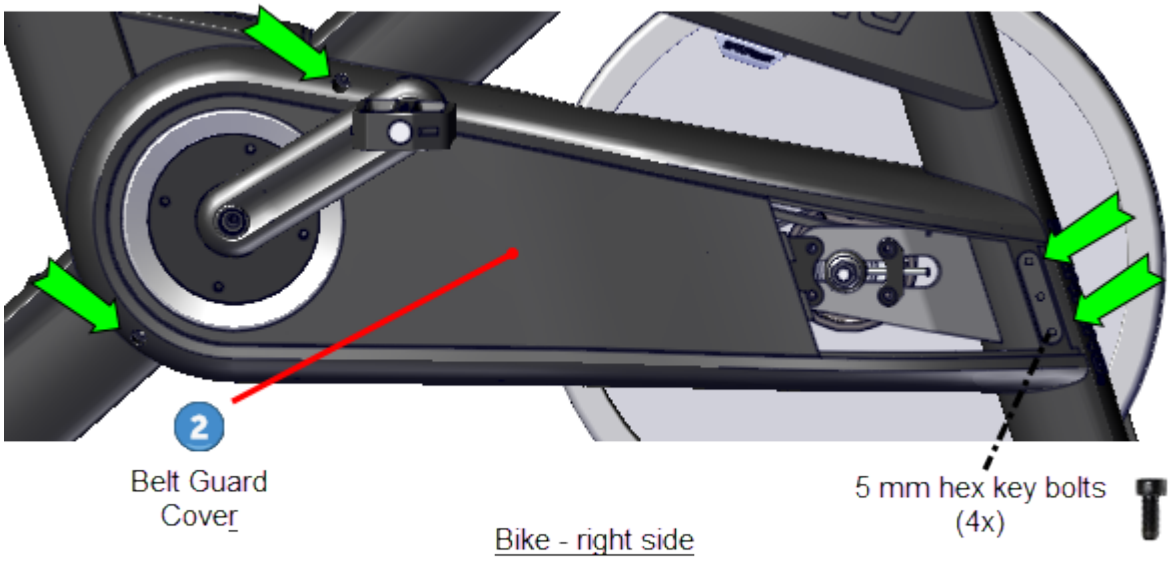


Installation Instructions

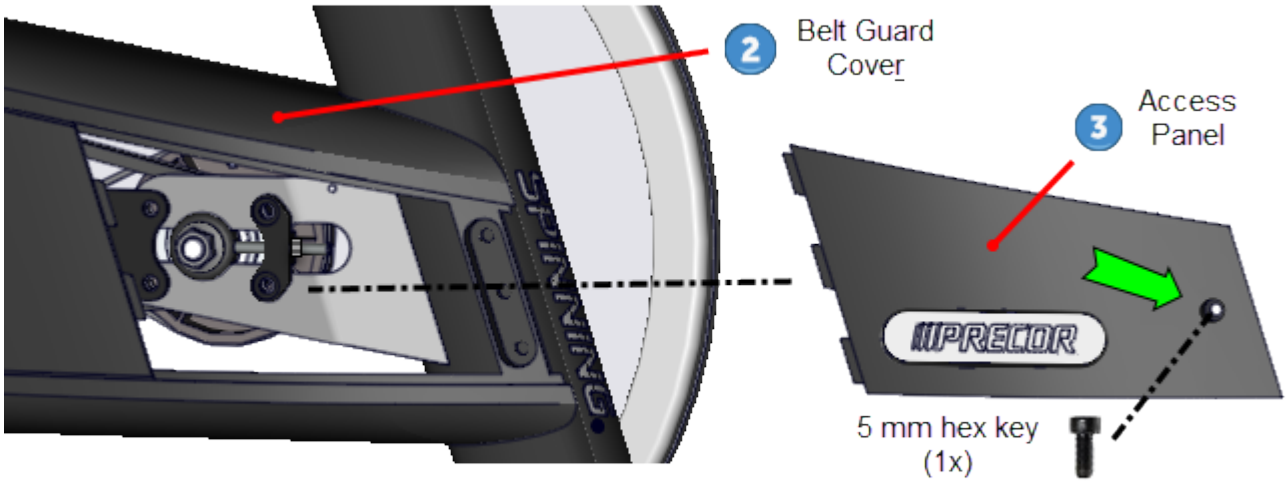
1. Position the crank arm to the 9 o'clock position and then carefuly slide the front cover over the pedal and crank arm. Retain part(s) and/or fastener(s) for installation.



2. Position the cover over the frame cover mounting bolts and secure using the 5 mm hex key fasteners (4x).

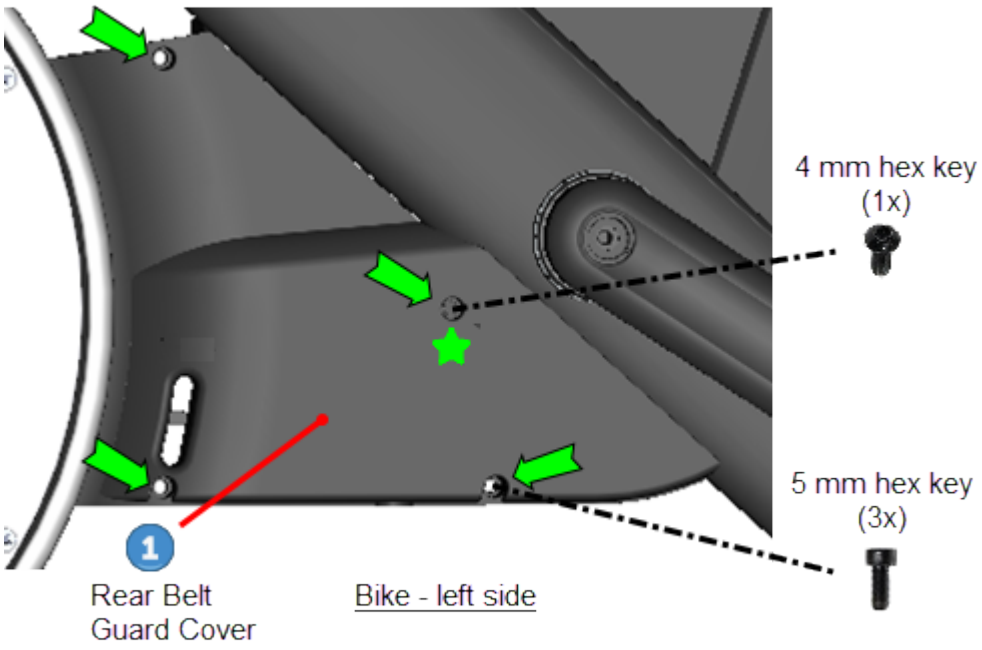


3. Install the front cover access panel 3 onto the front belt cover, insert the left side tabs first and close. Secure using the removed 5 mm hex key bolt (1x).



Bike - right side

4. Then install the rear (left side) belt guard cover 1, installing the center ★ 4 mm hex key fastener (1x) first and then the three outer 5 mm hex key fasteners (3x).



See Also

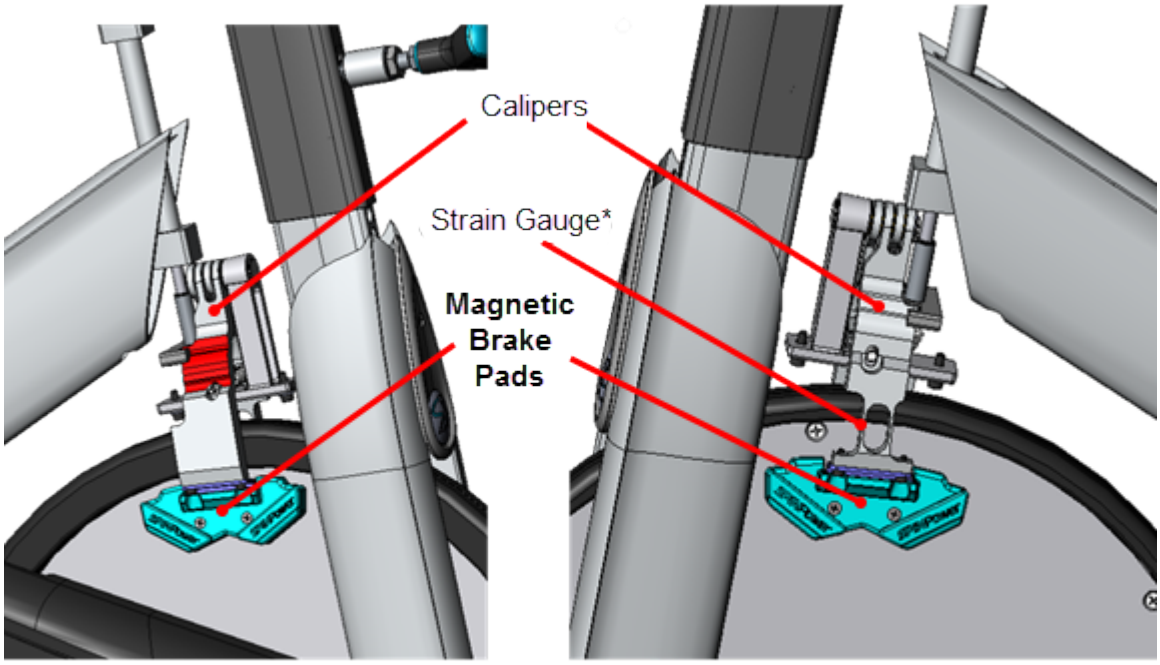
"Replacement Procedures" on page 32

Brake Pad Replacement

About

This procedure provides instruction to remove and install the magnetic Brake Pads.

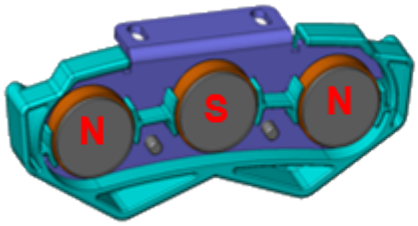
The brake pads use opposed magnetic force to vary the flywheel resistance level and integrated caliper strain gauge to calculate the measured power in watts. The brake pads are mounted on the bottom of the left and right caliper.



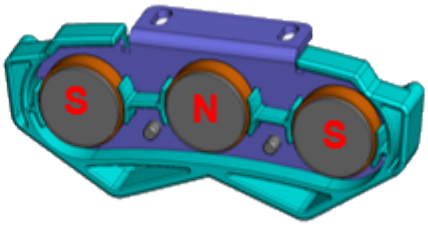
Note: * Spinner® Chrono™ Power models only.

Brake pad replacement

The brake pad magnets are north-south polarized and must be replaced as a set to ensure proper polarization.



Righ Brake Pad



Left Brake Pad

Strong magnetic force

The brake pads have a very strong magnetic force and attraction to the flywheel or any ferromagnetic metal object. . The brake pads can easily be ripped from your grasp and snapped against the metal object damaging the pad. Be very careful to hold the brake pads tightly when in close proximity to the flywheel during the brake pad removal and installation procedures.

CAUTION: The magnetic force of the brake pad is very strong and when in close proximity to the flywheel (or any metal object) will quickly snap the pad against the flywheel (or other metal) object causing damage to the brake pad magnets. Firmly hold the magnetic brake pads during removal/installation procedures to avoid damaging the brake pads.

Incorrect Power measurements

The brake pad-flywheel gap must be calibrated for each installation or whenever it is detected that the power measurement is incorrectly computed. If the brake pad gap is not correctly set, the power measurement AutoCal correction will not be correctly determined causing the resultant Power (watts) measurement to be incorrect. You must use the OEM magnetic gap fixture tool to properly set the gap at installation. The pads have slotted mounting holes to allow brake pad-flywheel gap adjustment.

I*nconstant Power measures*

If multiple bikes are not showing similar power (watts) results at common torque and rpm settings, the bikes most probably have been incorrectly AutoCalibrated, see "Verify the power (watts) measurement: " on page 17.

Specialized Tools

Tool		Part Number	Qty
Magnetic Gap Fixture kit*		PPP000000058248101	1*

Tool	Part Number	Qty

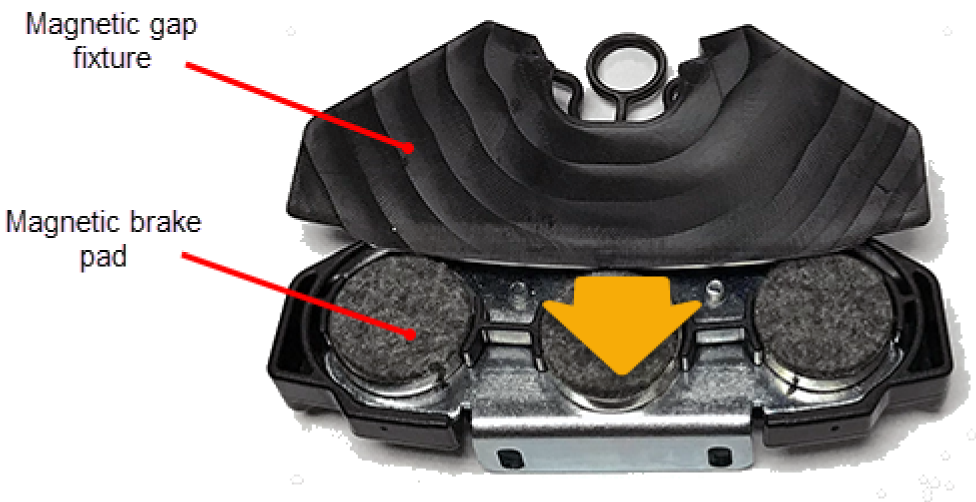
Note: * Each Magnetic Gap Fixture kit contains two (2x) Magnetic Gap Fixture tools.
Only one kit is required to complete the brake pad adjustment.

Procedure

Review entire procedure before starting.

Removal

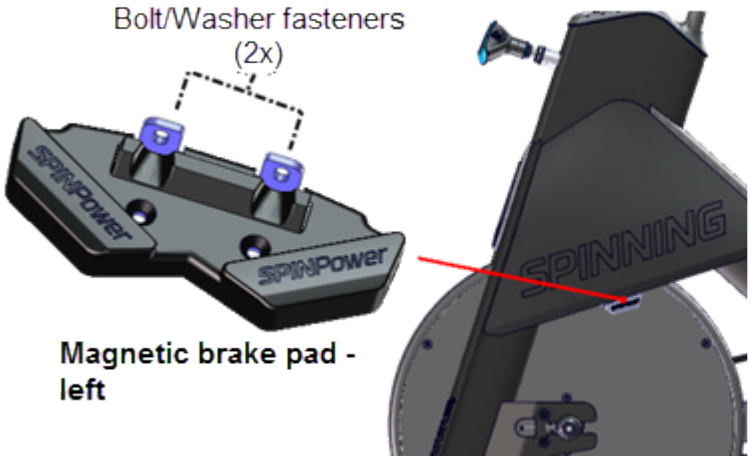
1. Remove all brake pad resistance by turning the resistance knob fully counterclockwise (-).
2. Mount a magnetic gap fixture onto both the left and right brake pads.



Note: It is recommended that a magnetic gap fixture (2x) be mounted on both the left and right brake pads before starting the brake pad installation procedure. The fixture will help to prevent accidental damage to the brake pad and/or scratching the flywheel surface.

3. Firmly hold the left brake pad while removing the two 3 mm hex key bolts and washers. When removing the brake pad past the flywheel the pads strong magnetic attraction can quickly pull the pad from your hand snapping it against the flywheel damaging the brake pad. Retain the pads and fastener hardware for installation.

CAUTION: The magnetic force of the brake pad is very strong and when in close proximity to the flywheel (or any metal object) will quickly snap the pad against the flywheel (or other metal) object causing damage to the brake pad magnets. Firmly hold the magnetic brake pads during removal/installation procedures to avoid damaging the brake pads.

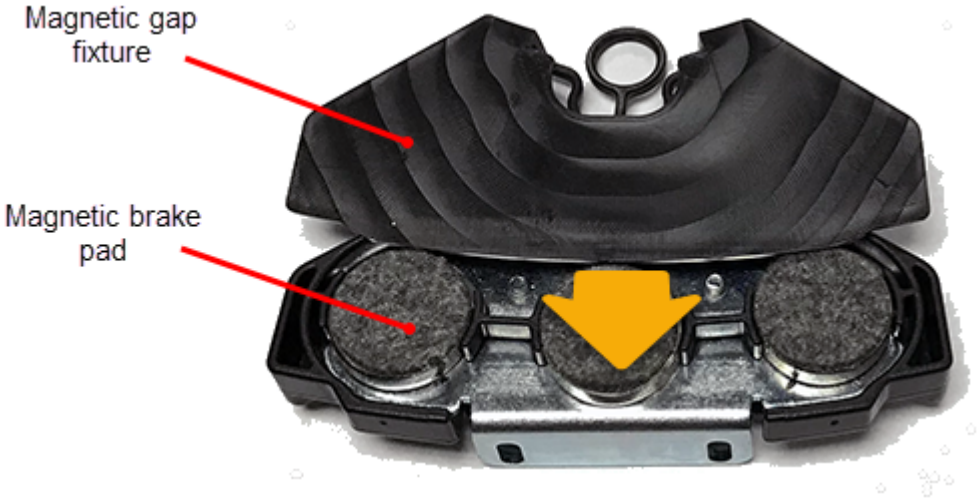


Caution:
Firmly hold the brake pads during removal and installation to prevent the brake pad from snaping against the flywheel and damaging the pad.

4. Repeat the procedure to remove the right brake pad.

Installation

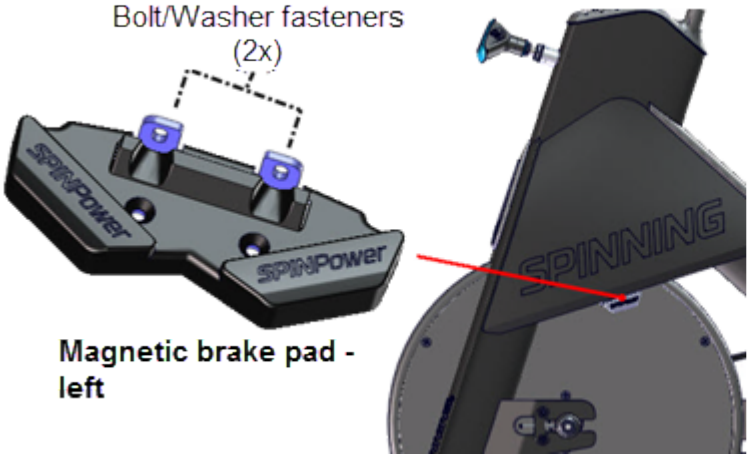
1. Mount a magnetic gap fixture onto the left and right brake pads.



Note: It is recommended that a magnetic gap fixture (2x) be mounted on both the left and right brake pads before starting the brake pad removal procedure. The fixture will help to prevent accidental damage to the brake pad and/or scratching the flywheel surface.

1. Reinstall the left and right brake pads onto the respective calipers and secure using the two 3 mm hex key bolts (2x) and washers (2x). Loosely hand tighten the fasteners allowing brake pad movement.

TIP: Increasing the resistance will move the calipers closer to the flywheel which provides more room between the caliper and frame weldment to install the mounting bolts and washers.



Magnetic brake pad - left

Caution:
Firmly hold the brake pads during removal and installation to prevent the brake pad from snaping against the flywheel and damaging the pad.

2. Adjust the brake pad gap and verify the resistance knob operation, see "Brake Pad Adjustment" on page 15.
3. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

See Also

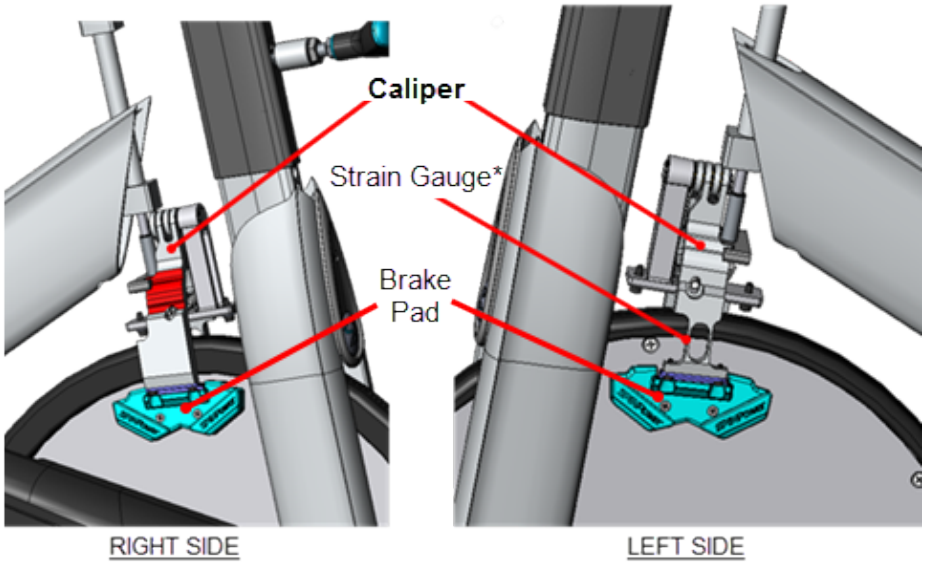
"Replacement Procedures" on page 32

Brake Caliper Assembly Replacement

About

This procedure provides instruction to remove and install the Brake Caliper assembly. There are separate replacement procedures, one for the Spinner® Chrono[1]™ Power and one for the Spinner® Climb™ models.

Brake Caliper replacement requires removal of the flywheel, drive belt, and generator belt.



Note: * Spinner® Chrono™ Power models only.

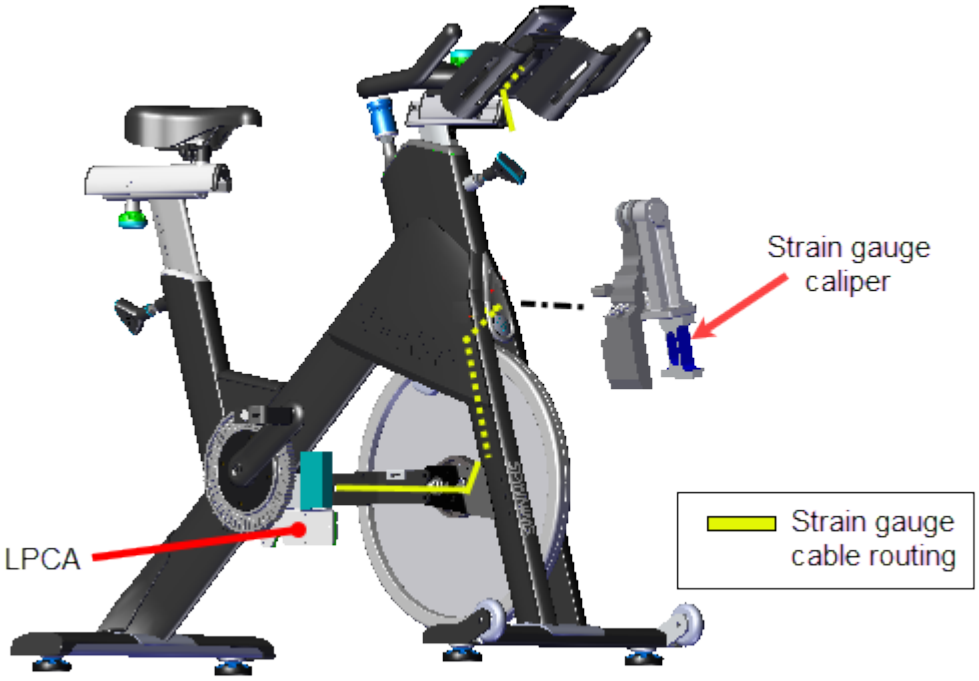
Strain gauge cable routing

(Spinner® Chrono™ Power models only)

Beginning from the strain gauge left side caliper, the cable crosses to the right side and enters the right fork weldment upper cable access hole. From there the cable travels down the right fork weldment exiting at the lower cable access hole traveling across the cross member connecting to the LPCA[2] board strain gauge input connector.

[1]Spinner® Chrono™ Power bike.

[2]Lower printed circuit assembly; generally this refers to the lower board. On treadmills, this is the motor controller unit (MCU), and on self-powered units, it is the main board in the lower section.



Strain Gauge cable routing

Specialized Tools

Tool		Part Number	Qty
Magnetic Gap Fixture kit*		PPP000000058248101	1*
Cable Puller (fish tape)**		General purpose**	2

Note: * Each Magnetic Gap Fixture kit contains two (2x) Magnetic Gap Fixture tools. Only one kit is required to complete the brake pad adjustment..
** A length of rope and tape could be used instead of a cable puller. Tape the rope to the end of the cable and pull the cable through the frame weldment.

Parts

QTY	Part Number	Description	Image
2	PPP00RX2809393M000	Push Mount Cable Tie	
4	General purpose	Cable Zip Tie (6 - 8 in)	
1	PPP00RX10L93XSX000(1)	Self-Adhesive Cable Clip	
Notes: (1) Only needed if the cable clip is loose, damaged, or missing.			

Procedure

Replacement Procedures

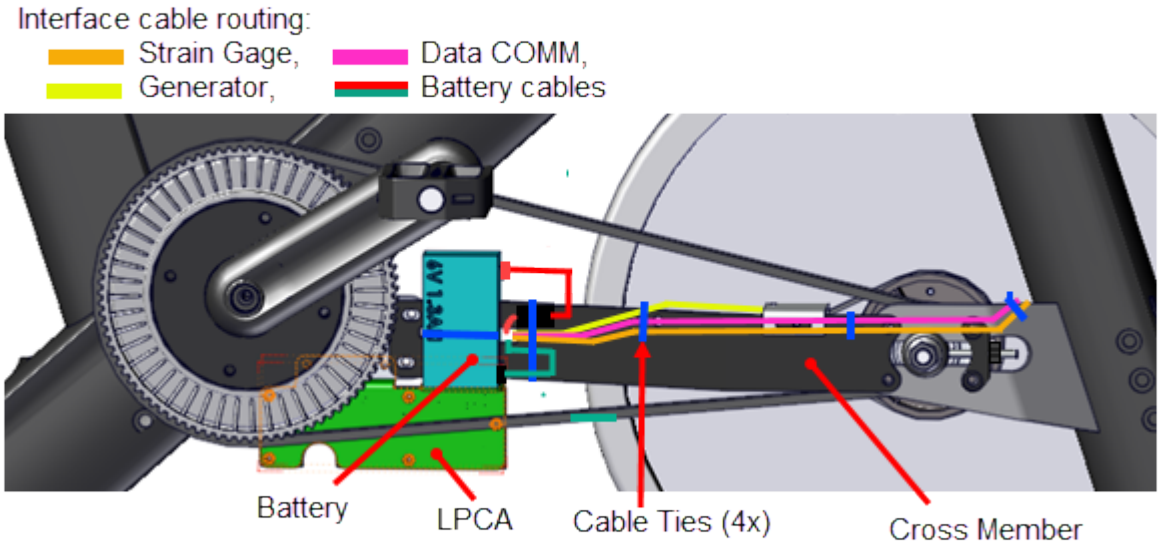
- Spinner® Chrono™ Power models
- Spinner® Climb™ models only models

Replacement Procedure - (Spinner® Chrono™ Power models only)

Review entire procedure before starting.

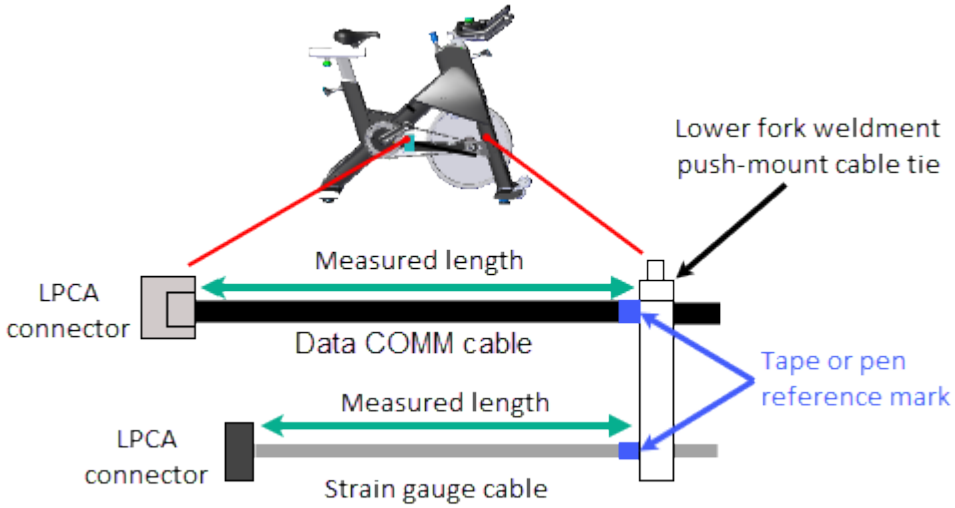
Removal

1. Remove front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38.
2. Cut the four cross member cable-ties (4x) that secure the strain gauge cable to the cross member. Discard the cable ties.

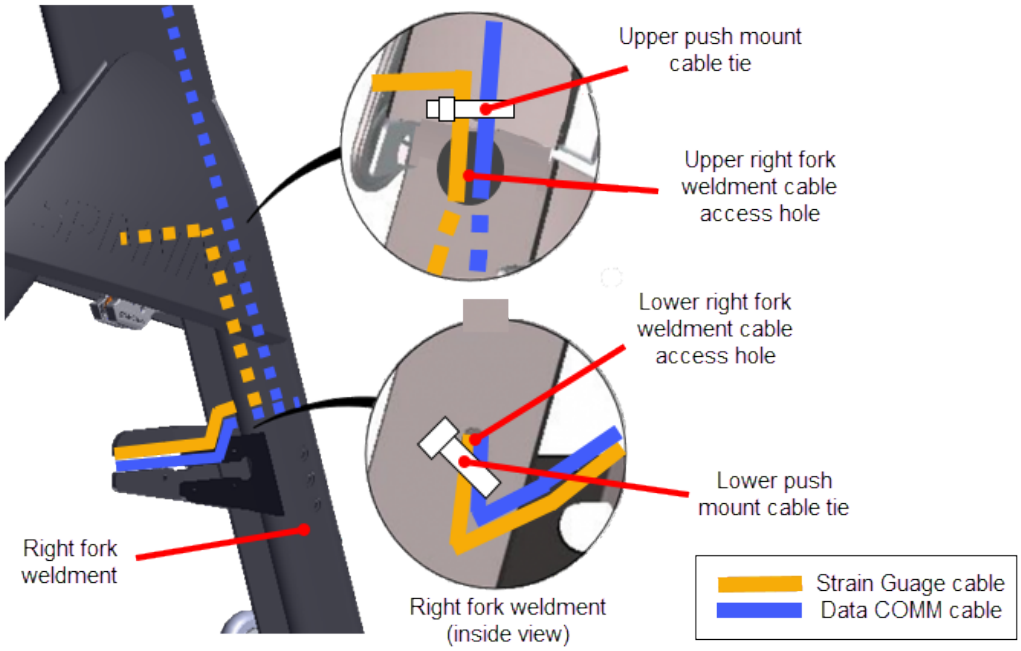


3. Disconnect the Data COMM, Strain Gauge, Battery, and Generator cables. Use a pen or tape to mark the Data COM and Strain Gauge cables at the lower fork push mount cable tie.

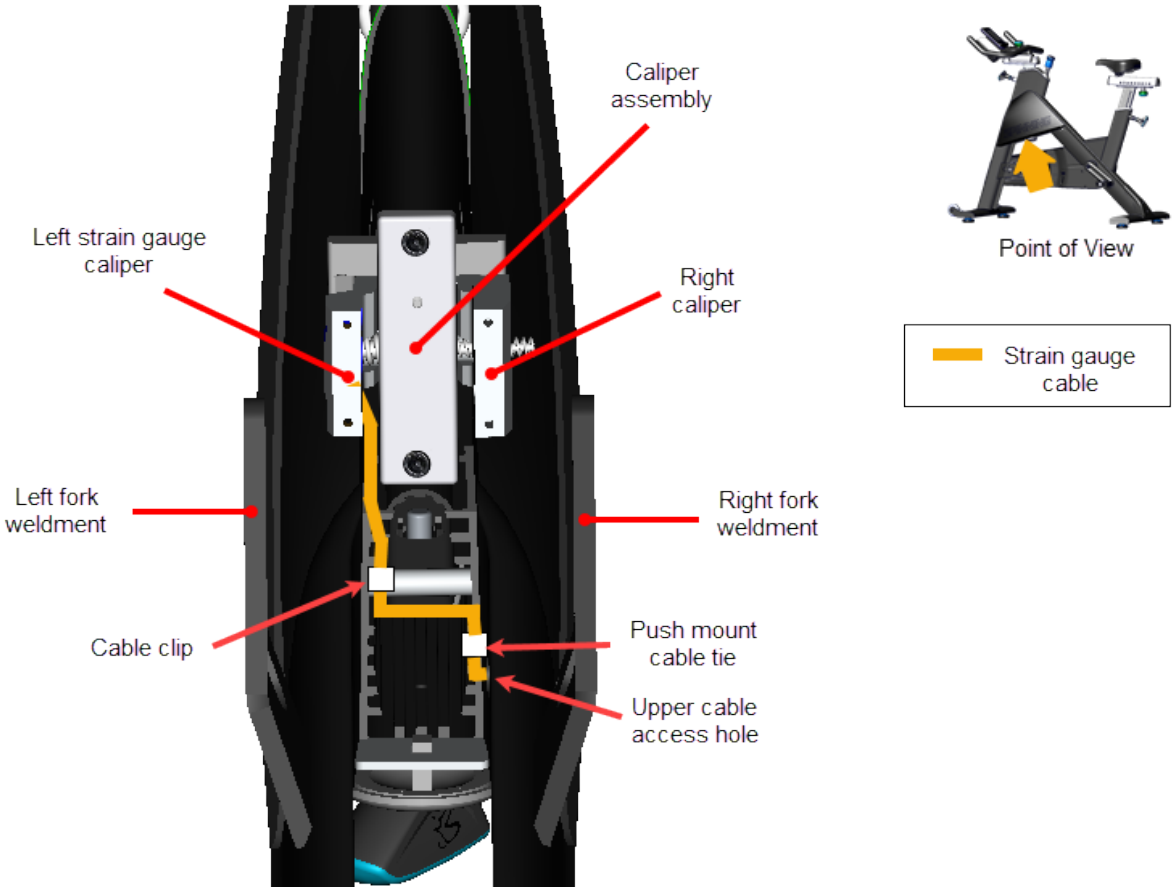
Note: Alternatively you can measure and record the Data COMM cable and Strain Gauge cable lengths from the LPCA connectors to the right fork lower push-mount cable tie. The reference marks (or measured cable lengths) will be used during the installation process.



2. Remove the flywheel, see "Drive Belt, Generator Belt, and Flywheel Replacement" on page 75.
3. Carefully cut and remove the upper and lower push mount cable ties (2x) that secure the strain gauge and Data Comm cables to the inside of the right fork frame weldment. Discard the push mount cable ties.

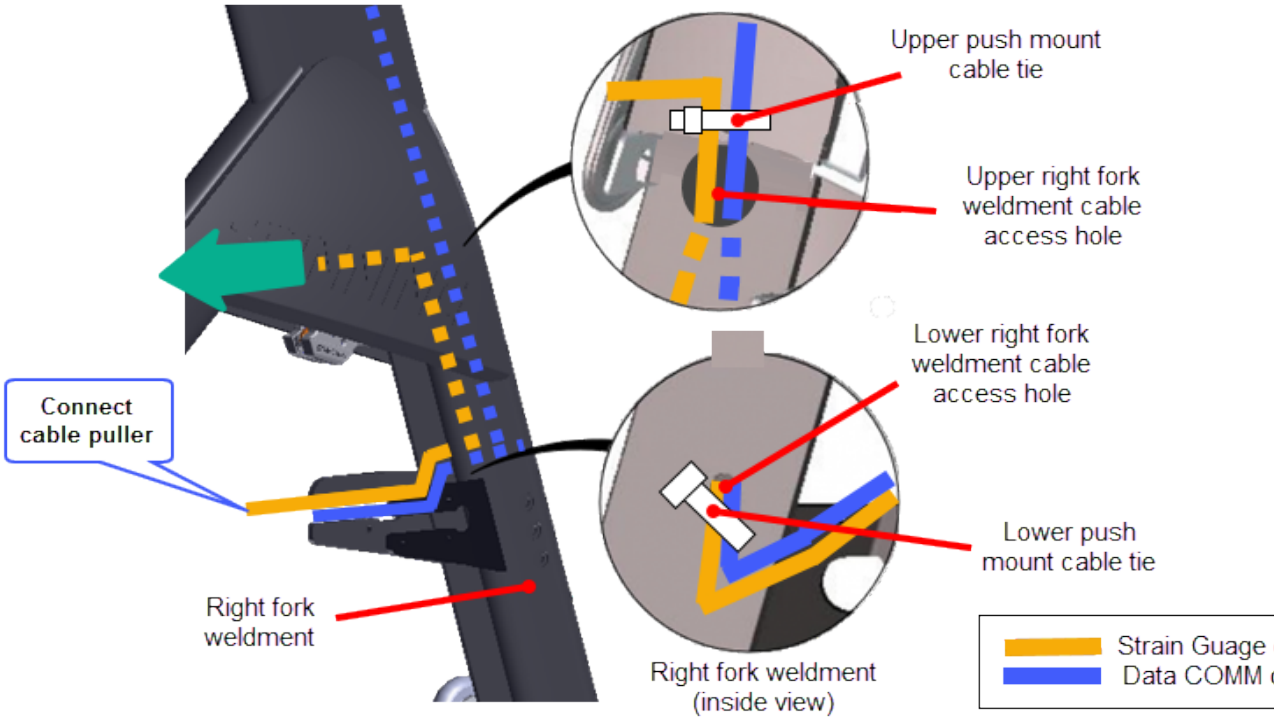


4. Remove the strain gauge cable from the cable clip located on the upper left fork frame weldment (next to the left caliper).

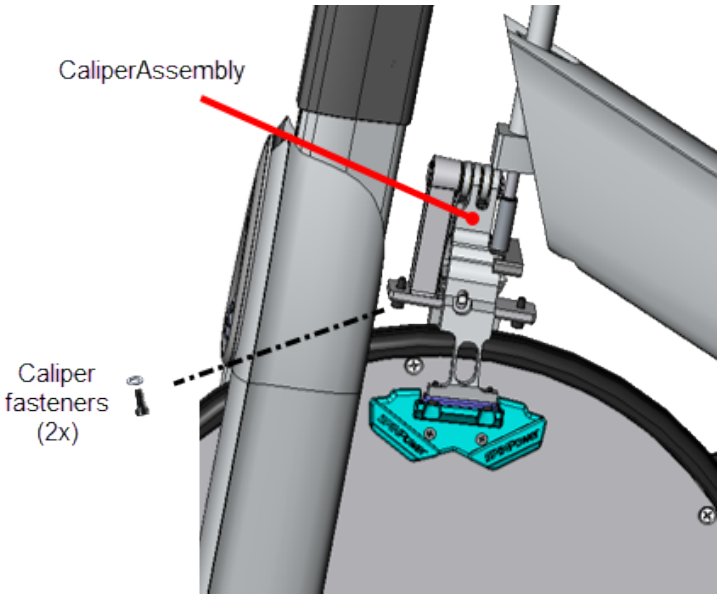


5. Remove the strain gauge cable from the inside of the right fork frame weldment.
   a. Attach a cable puller (or fish tape) to the strain gauge cable LPCA connector.
   b. Then grasp the strain gauge cable (and attached cable puller) at the right fork weldment upper cable access hole and gently pull the cable from the inside of the right fork weldment. Stop pulling when the cable puller exits the upper cable access hole. Disconnect the cable puller from the strain gauge cable leaving the cable puller inside the right fork weldment. The cable puller will be used to reinstall the strain gauge cable.

IMPORTANT: Attach a cable puller (or fish tape) to the LPCA connector end of the strain gauge cable before removing from the inside of the fork frame weldment. The cable puller will be used to reinstall the cable through the frame.



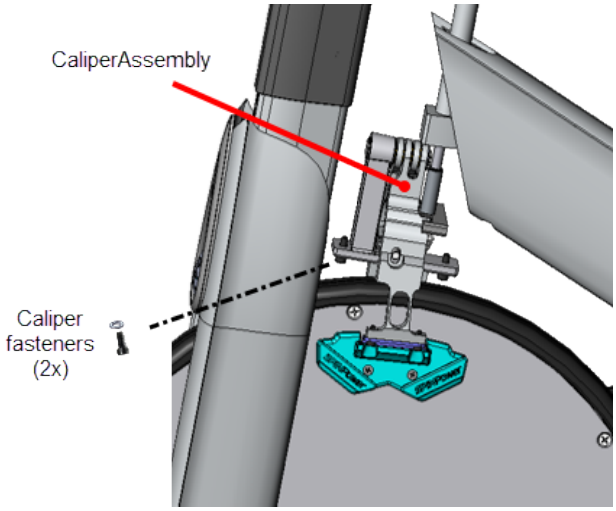
6. Remove the two 4 mm hex key bolts (2x) and washers (2x) that secure the caliper assemble to the frame and remove. Hold the caliper assembly while removing to prevent it from falling to the floor causing damage. Retain part(s) and/or fastener(s) for installation.



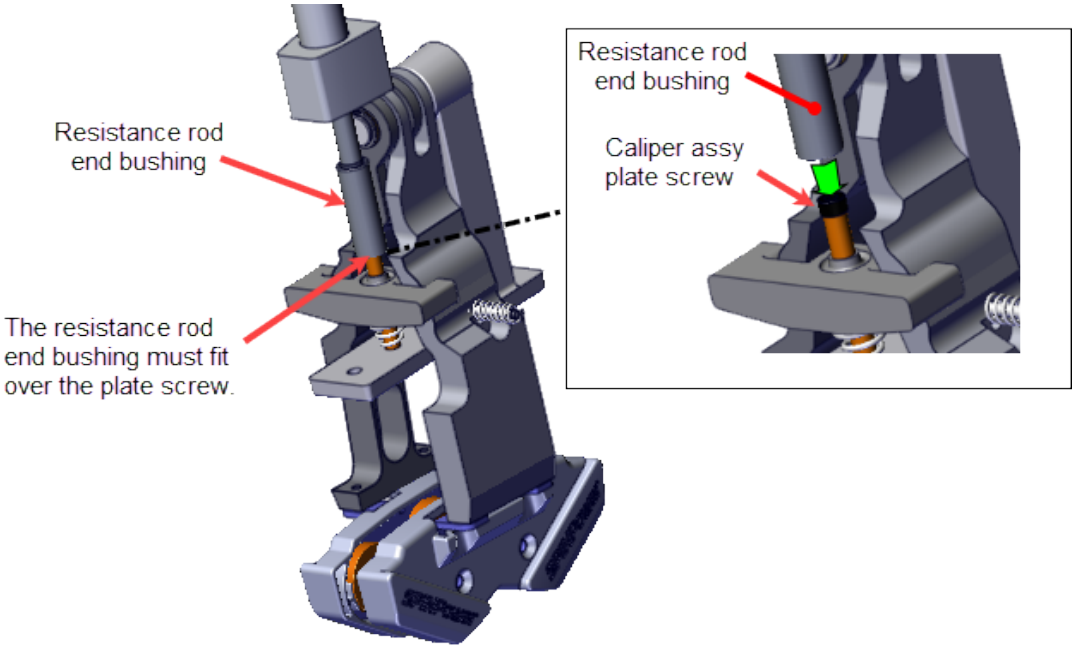
Installation

1. Install the brake caliper assembly :

   a. Install the caliper assembly so that the strain gauge is located on the left side of the frame. Align the two mounting bolt holes and attach using the two previously removed 4 mm hex key bolts (2x) and washers (2x). Loosely tighten the fasteners.

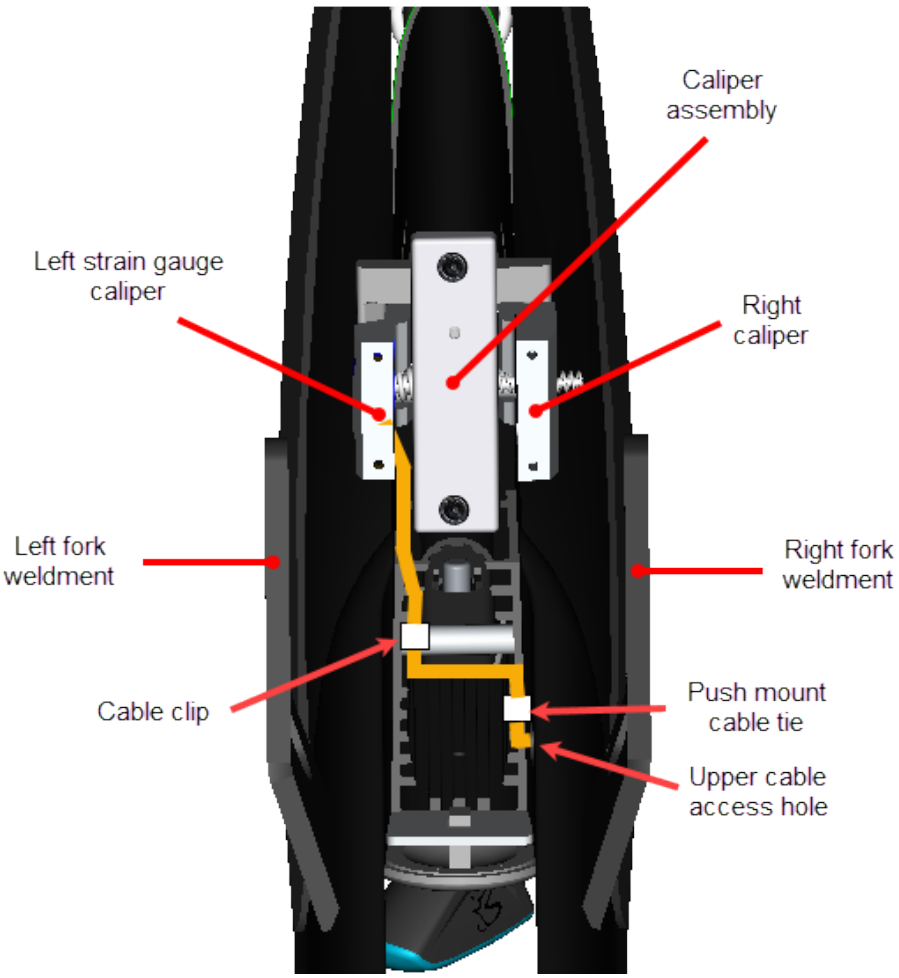


   b. Make sure that the resistance rod end bushing is seated over the caliper assembly plate screw and then fully tighten the two (2x) fasteners.



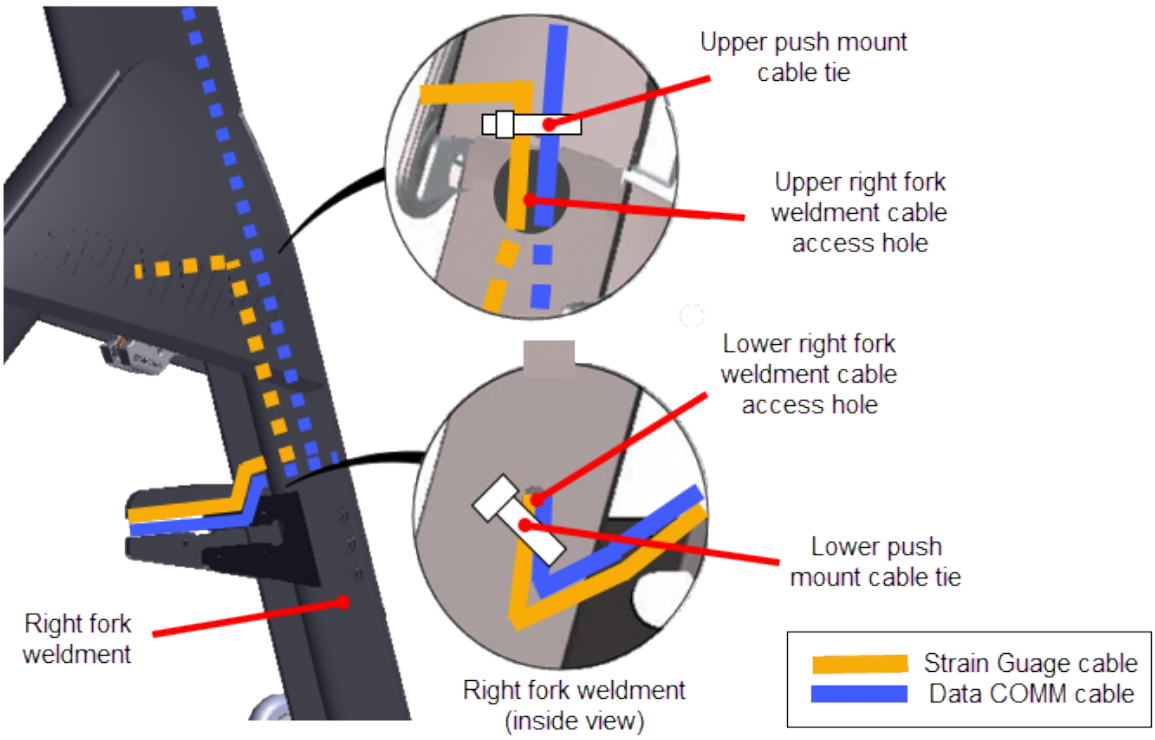
Note: Make sure that the resistance knob rod end bushing is seated over the caliper plate screw.

2. Reinstall the strain gauge cable downward through the inside of the right fork weldment:
    a. Attach the strain gauge cable - LPCA connector to the previously installed cable puller exiting from the upper fork weldment cable access hole.
    b. Grasp the cable puller exiting from the right fork lower cable access hole and pull the strain gauge cable downward through the inside of the right fork frame weldment. Leave slack in the cable, do not pull the cable tight. Remove the cable puller from the cable.
3. Insert the strain gauge cable into the self-adhesive cable clip located next to the left caliper magnetic sensor.
    a. If the selt-adhesive cable clip (PPP00RX10L93XSX000) is loose or missing, replace as follows:
        - Remove the existing self-adhesive cable clip.
        - Remove any residue adhesive using a clean rag and Isopropyl alcohol cleaning solvent.
        - Reinstall a new self-adhesive cable clip (PPP00RX10L93XSX000).

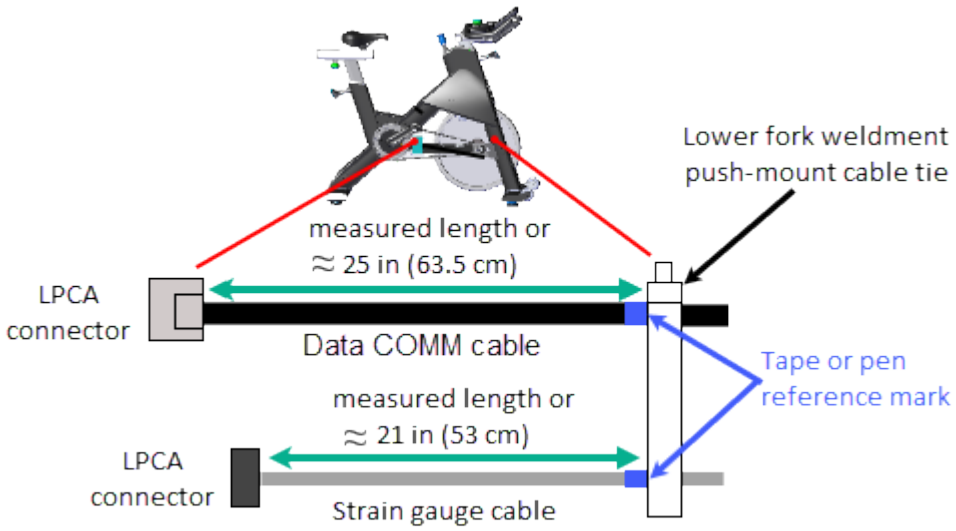


4. Secure the Data COMM and strain gauge cables to the fork weldment lower and upper push-mount cable ties: Secure the cables to the lower push-pin first and then the upper push-pin cable tie.
    a. Install new upper and lower right fork weldment push-mount cable ties (2x); one next to the upper right fork weldment cable access hole and one next to the lower right fork weldment cable access hole.

    .



    b. Secure the Data COMM cable and Strain Gauge cables to the right fork weldment lower push-mount cable tie:
        - Place the Data COMM cable and Strain Gauge cable into the right fork lower push-pin cable tie. Adjust each cable to the prior marked lower push-pin reference mark (tape or pen) and tighten the cable tie.
        - Alternatively, adjust the Data COMM and Strain Gauge cable lengths to the prior measured length from the LPCA cable connectors to the lower push mount cable tie and then tighten the cable tie. If you did not make these measurements, adjust the Data COMM cable length to approx. 25 in (63.5 cm) and the Strain Gauge cable length to approx. 21 in (53 cm) and then tighten the cable tie.



c. Secure the Data COMM cable and Strain Gauge cables to the right fork weldment upper push-mount cable tie at the following conditions:
   - **Strain Gauge cable**: Adjust the Strain Gauge cable so that there is a small amount of slack from the left caliper cable clip across the frame to the right side upper push-mount cable tie.
   - **Data COMM cable**: Pull the Data COMM cable upward thru the upper fork weldment cable access hole until snug. Then secure the cable so that the cable slack will NOT touch or rub against the top of the fly wheel.
   - When both cables are set to the install conditions, tighten the upper push-pin cable tie.

5. Reinstall the flywheel, see "Drive Belt, Generator Belt, and Flywheel Replacement" on page 75.
6. Hand rotate the pedals and verify that the Data COMM cable does NOT touch or rub against the top of the flywheel.
   - If the cable rubs against the flywheel, the Data COMM cable slack must be readjusted so that the cable does not touch the flywheel. This may require removing the flywheel to make adjustments.

CAUTION: Rubbing against the top of the flywheel will damage the Data COMM cable. Make sure that the Data COMM cable does not touch the top of the flywheel and is securely attached to the upper push-pin cable tie. Remove slack as necessary.

7. Ride the bike and verify that the console powers on and is operating normally.
   - Make sure the **WATTS**, **RPM**, **TIME**, **DISTANCE**, and **INTERVAL** metrics are reporting correct information.

- Access the service mode and review the **ERROR LOG**, see "Error Log" on page 147. Make sure there are no current logged error code 30s "Communication issue with the LPCA".

8. Replace the front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38
9. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

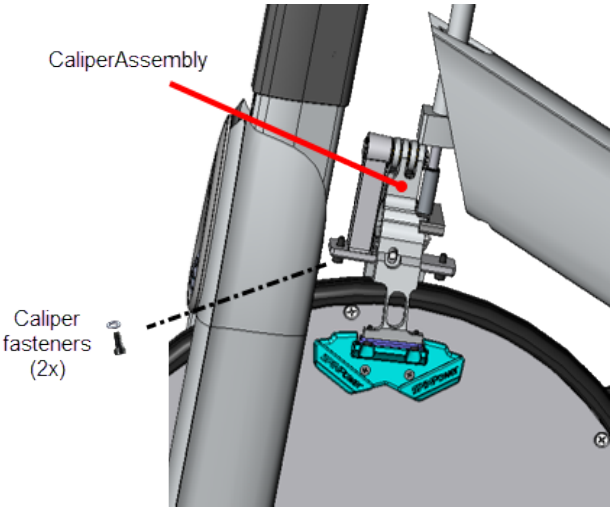
Replacement Procedure - (Spinner® Climb™ models only)

Review entire procedure before starting.

Removal

1. Remove front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38.
2. Remove the flywheel, see "Drive Belt, Generator Belt, and Flywheel Replacement" on page 75.

1. Remove the two 4 mm hex key bolts (2x) and washers (2x) that secure the caliper assemble to the frame and remove the caliper. Hold the brake caliper assembly while removing to prevent it from falling to the floor causing damage. Retain part(s) and/or fastener(s) for installation.

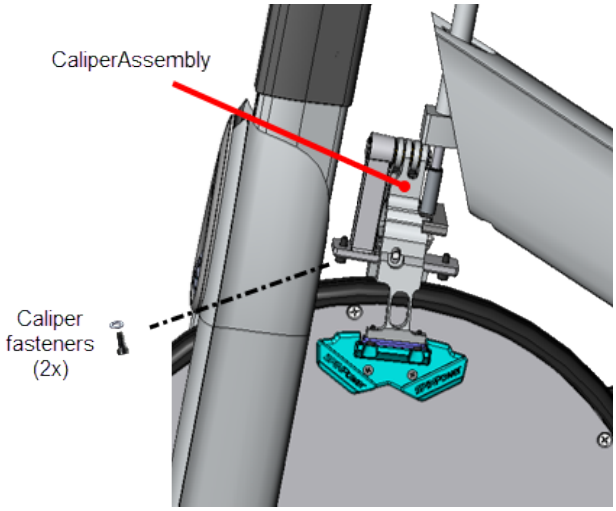


Installation

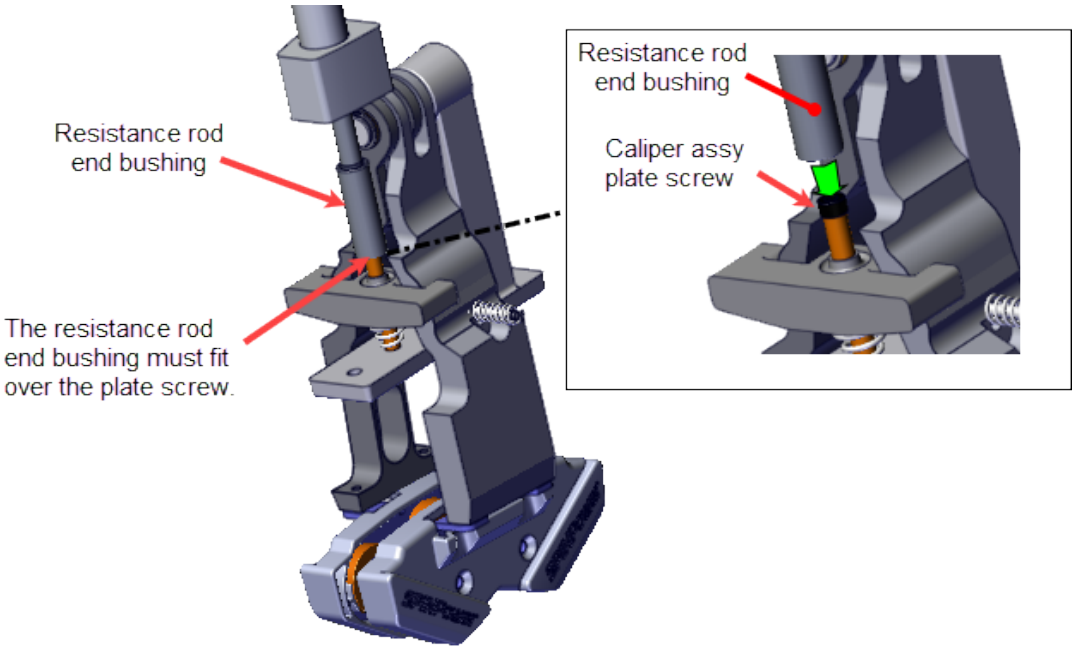
1. Install the brake caliper assembly :

   a. :Position the brake caliper assembly onto the frame weldment mounting bolts and secure using the two previously removed 4 mm hex key bolts (2x) and washers (2x). For Spinner® Chrono™ Power models, install the caliper assembly so that

the strain gauge is located on the left side of the frame.



b. Make sure that the resistance rod end bushing is seated over the caliper assembly plate screw and fully tighten the fasteners.



Note: Make sure that the resistance knob rod end bushing is seated over the caliper plate screw.

2. Reinstall the flywheel, see "Drive Belt, Generator Belt, and Flywheel Replacement" on page 75.
3. Replace the front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38

4. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

See Also

"Replacement Procedures" on page 32

Data COMM Cable Replacement

Applies To: (Spinner® Chrono[1]™ Power models only)

About

This procedure provides instruction to remove and install the Data COMM cable.

Data COMM cable routing

Starting from the console connection, the Data COMM cable enters and travels down the handle bar post continuing down the inside of the right fork weldment exiting the lower cable access hole located next to the upper edge of the cross member. The cable continues rearward on the right side of the cross member crossing over to the left side connecting to the LPCA[2] Data COMM cable port.

Data COMM cable routing

[1]Spinner® Chrono™ Power bike.

[2]Lower printed circuit assembly; generally this refers to the lower board. On treadmills, this is the motor controller unit (MCU), and on self-powered units, it is the main board in the lower section.

Specialized Tools

Tool		Part Number	Qty
Magnetic Gap Fixture kit*		PPP000000058248101	1*
Cable Puller (fish tape)**		General purpose**	2
Note: * Each Magnetic Gap Fixture kit contains two (2x) Magnetic Gap Fixture tools. Only one kit is required to complete the brake pad adjustment. ** A length of rope and tape could be used instead of a cable puller. Tape the rope. to the end of the cable and pull the rope/cable through the frame weldment.			

Parts

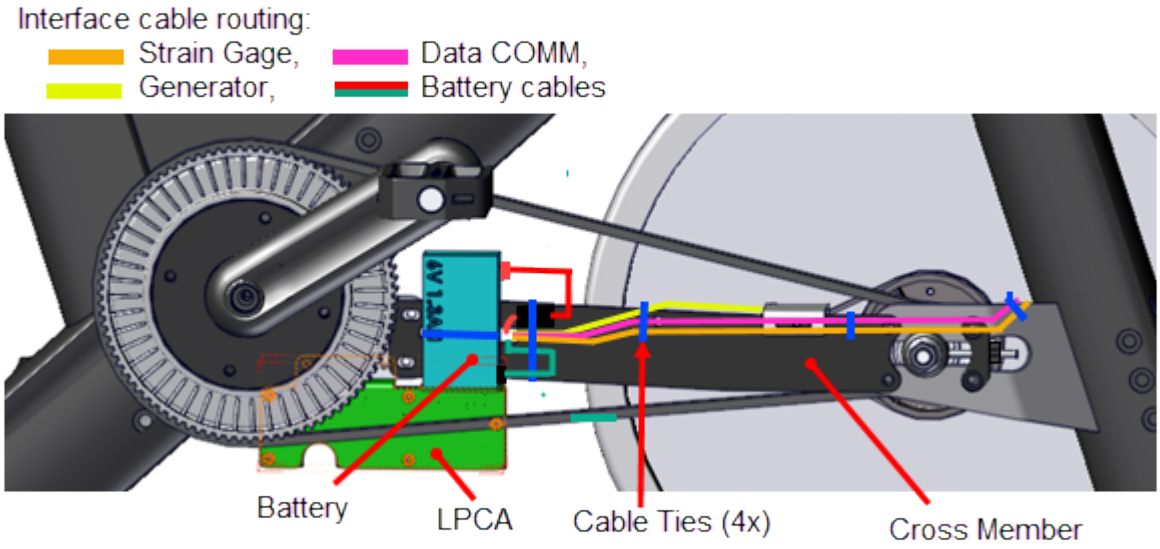
QTY	Part Number	Description	Image
2	PPP00RX2809393M000	Push Mount Cable Tie	
4	General purpose	Cable Zip Tie (6 - 8 in)	

Procedure

Review entire procedure before starting.

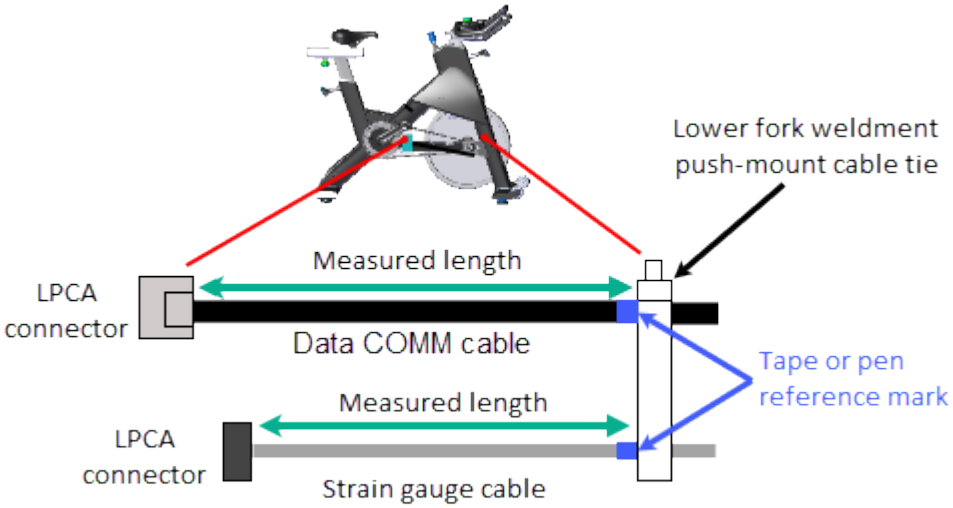
Removal

1. Remove front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38.
2. Cut the four cross member cable-ties (4x) that secure the Data COMM, strain gauge, generator, and battery cables to the cross member. Discard the cable ties.



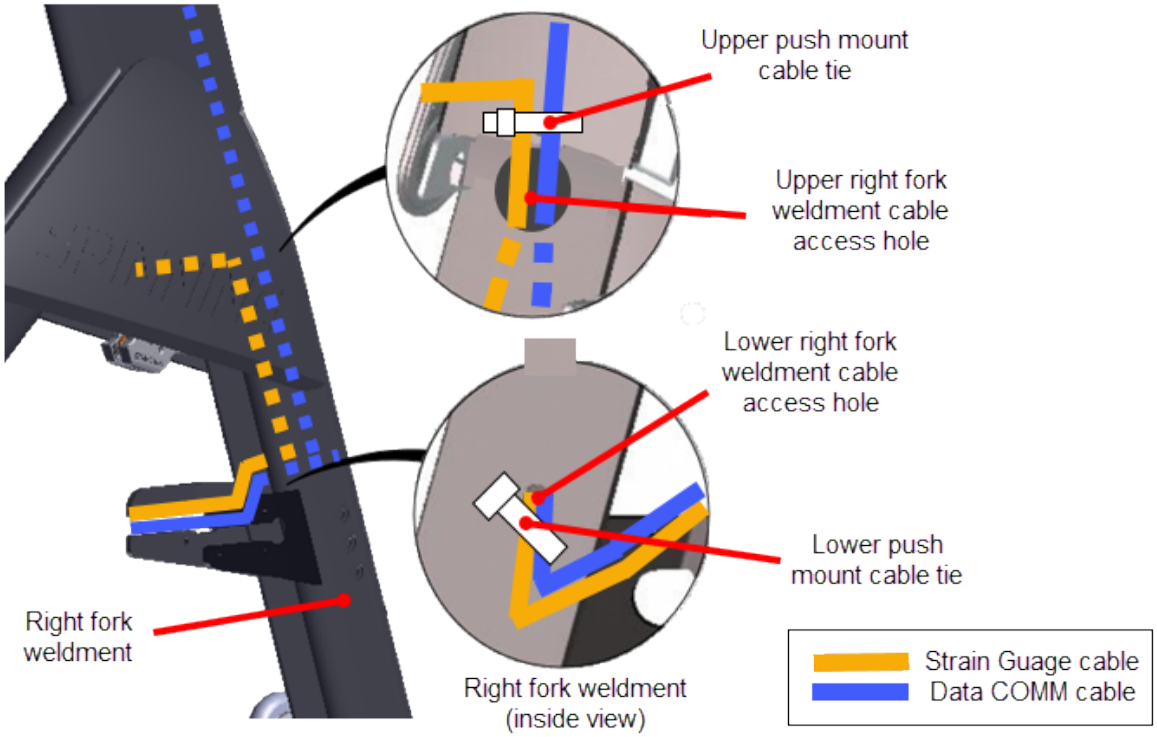
3. Disconnect the Data COMM, Strain Gauge, Battery, and Generator cables. Use a pen or tape to mark the Data COM and Strain Gauge cables at the lower fork push mount cable tie.

Note: Alternatively you can measure and record the Data COMM cable and Strain Gauge cable lengths from the LPCA connectors to the right fork lower push-mount cable tie. The reference marks (or measured cable lengths) will be used during the installation process.



4. Remove the flywheel which requires removing the LPCA board, the cross member, drive belt, and generator belt, see "Drive Belt, Generator Belt, and Flywheel Replacement" on page 75.

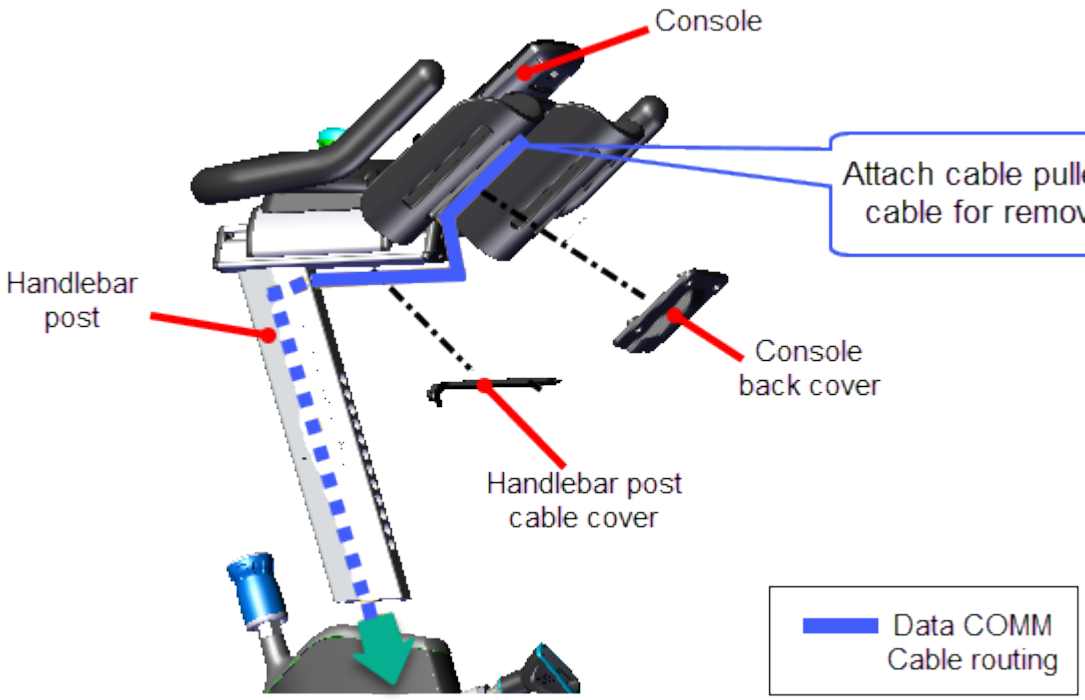
5. Carefully cut and remove the upper and lower push mount cable ties (2x) that secure the strain gauge and Data Comm cables to the inside of the right fork frame weldment. Discard the push mount cable ties.



6. Remove the four 4 mm (4x) hex key bolts and remove the console backplate cover. Disconnect the Data COMM cable from the console and set the console aside, see the "SPINNER® CHRONO™ CONSOLE" Operator's Guide.

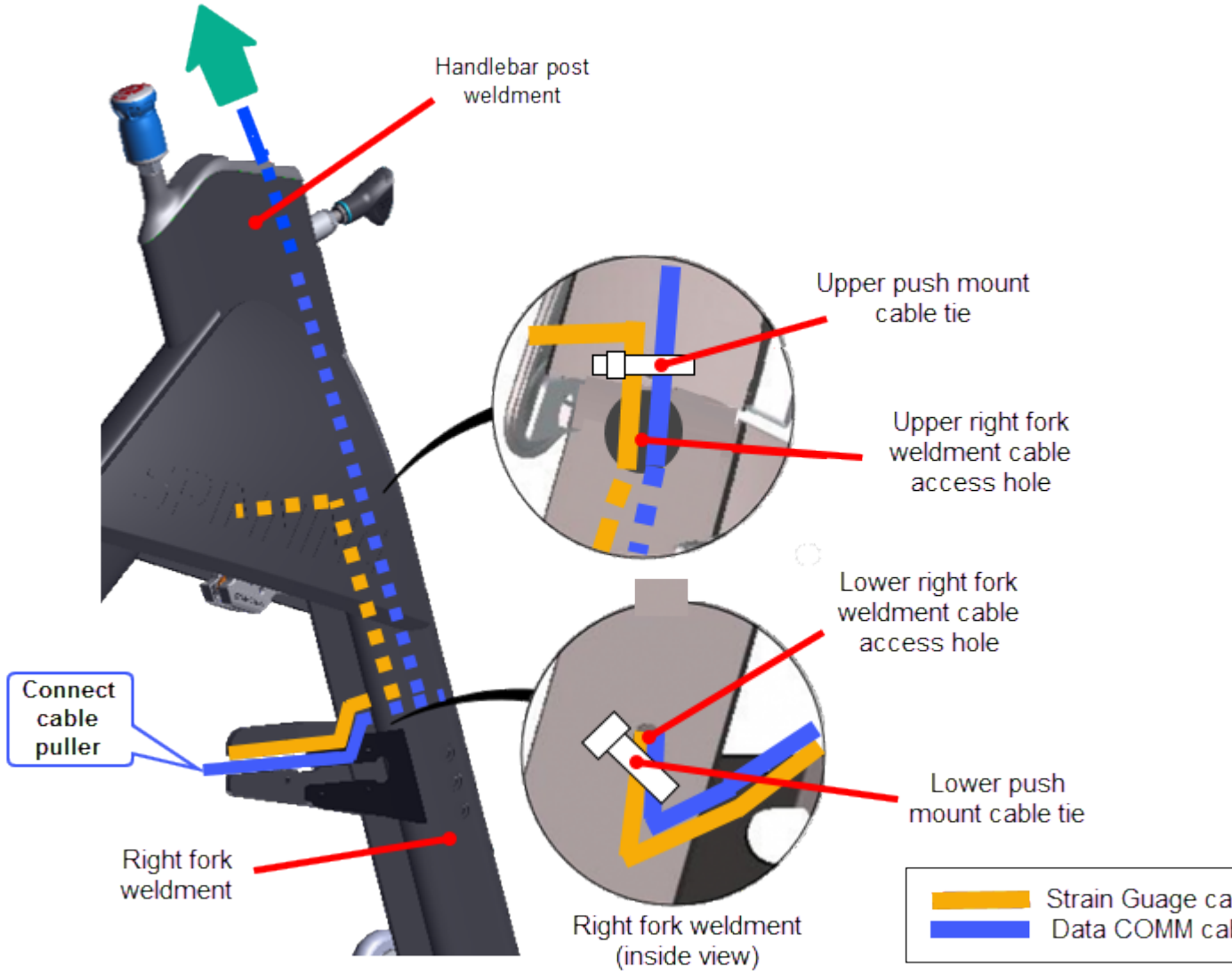
7. Remove the Data COMM cable from the handlebar assembly:
    a. Remove the two 2.5 mm hex key bolts (2x) and remove the handlebar post cable cover.
    b. Attach a cable puller to the Data COMM cable console connector.
    c. Pull the handlebar height adjust pop pin and carefuly lift the handlebar post from the top of the frame weldment. While holding the handlebar assembly, gently pull the Data COMM cable (and attached cable puller) downward and out from the inside of the handlebar post.
    d. Disconnect the Data COMM cable from the cable puller leaving the cable puller inside the handlebar post and set the handlebar assembly aside. The cable puller

will be used to reinstall the cable through the inside of the handlebar post.



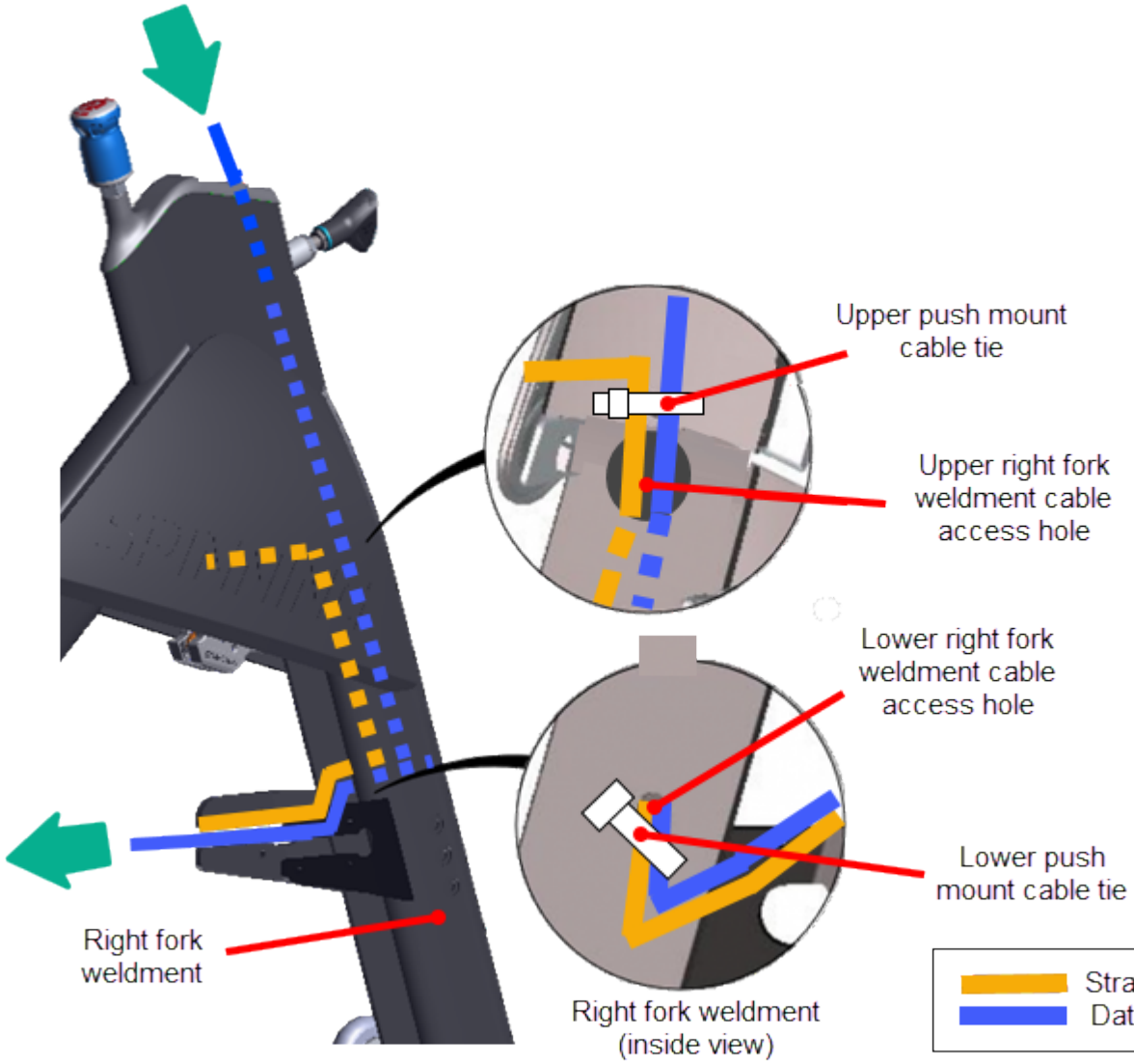
8. Remove the Data COMM cable from the inside of the handlebar post and right fork weldment:
   a. Attach a cable puller to the Data COMM cable LPCA connector.
   b. Gently pull the cable (and attached cable puller) upward through the inside of the right fork weldment (thru the lower and upper fork weldment cable access holes) and out the top of the handlebar post weldment. Stop pulling when the cable puller exits the top of the handlebar post weldment. Disconnect the cable puller from the Data COMM cable leaving the cable puller inside the right fork weldment.

IMPORTANT: Attach a cable puller (or fish tape) to the LPCA connector end of the Data COMM cable before removing from the inside of the fork frame weldment. The cable puller will be used to reinstall the cable through the frame.



Installation

1. Reinstall the Data COMM cable through the inside of the right fork weldment and out the top of the handlebar post weldment.
    a. Attach the Data COMM cable - LPCA connector to the previously installed cable puller exiting the top of the handlebar post weldment.
    b. Grasp the cable puller at the lower cable access hole and gently pull the cable puller downward through the inside of the handlebar post weldment and right fork weldment exiting though the lower right fork weldment cable access hole.



c. Disconnect the cable puller from the Data COMM cable.

2. Secure the Data COMM and Strain Gauge cables to the right fork weldment lower and upper push-mount cable ties: Secure the cables to the lower push-pin cable tie first and then to the upper push-pin cable tie.
   a. Install new upper and lower right fork weldment push-mount cable ties (2x); one next to the upper right fork weldment cable access hole and one next to the lower right fork weldment cable access hole.

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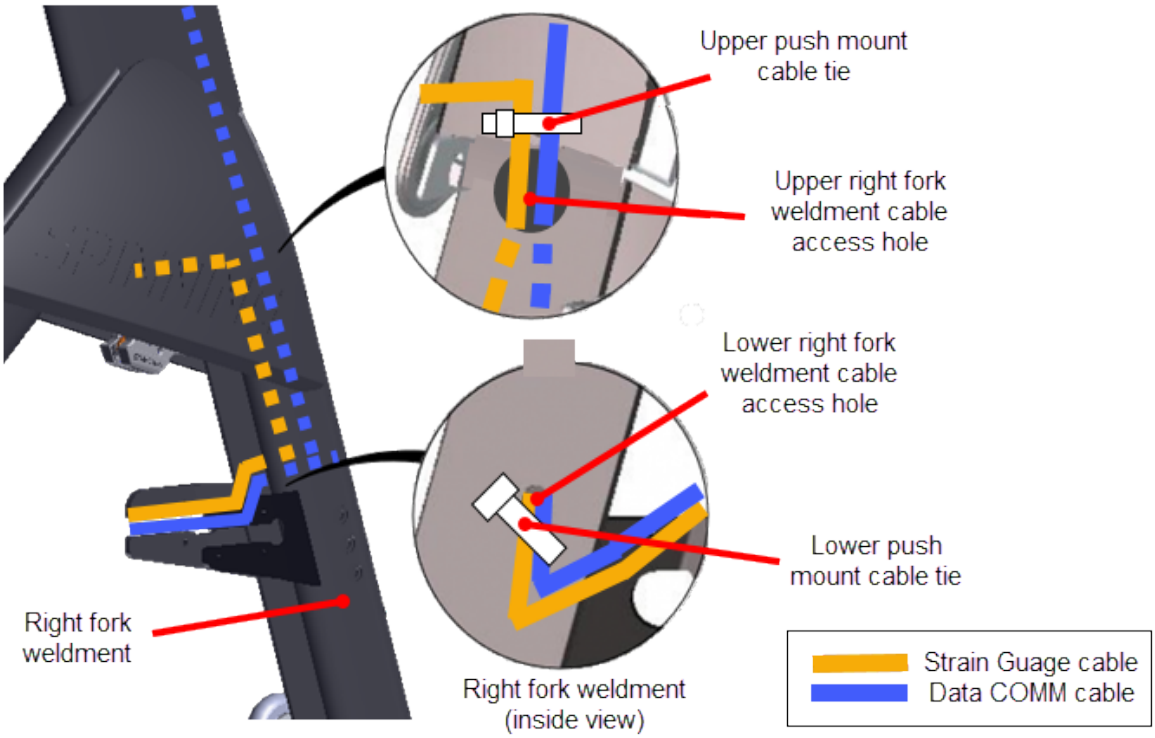
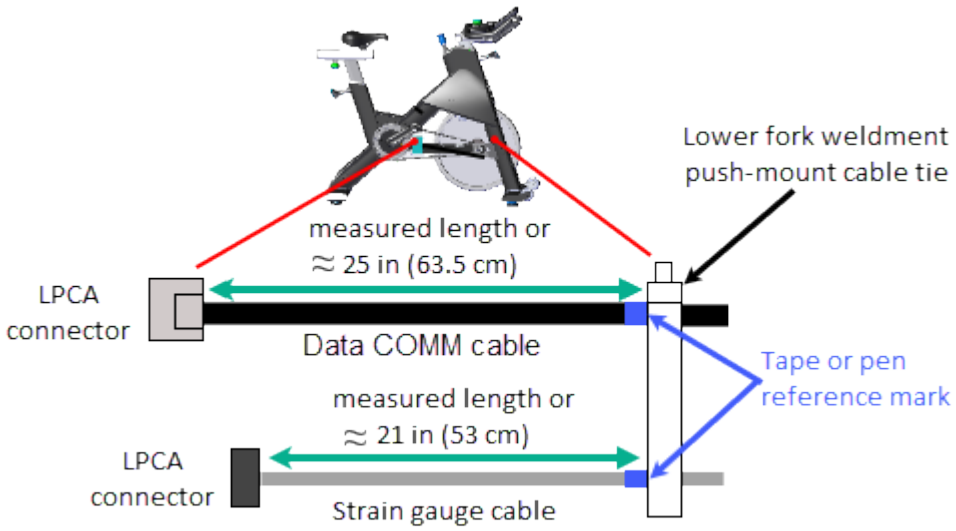


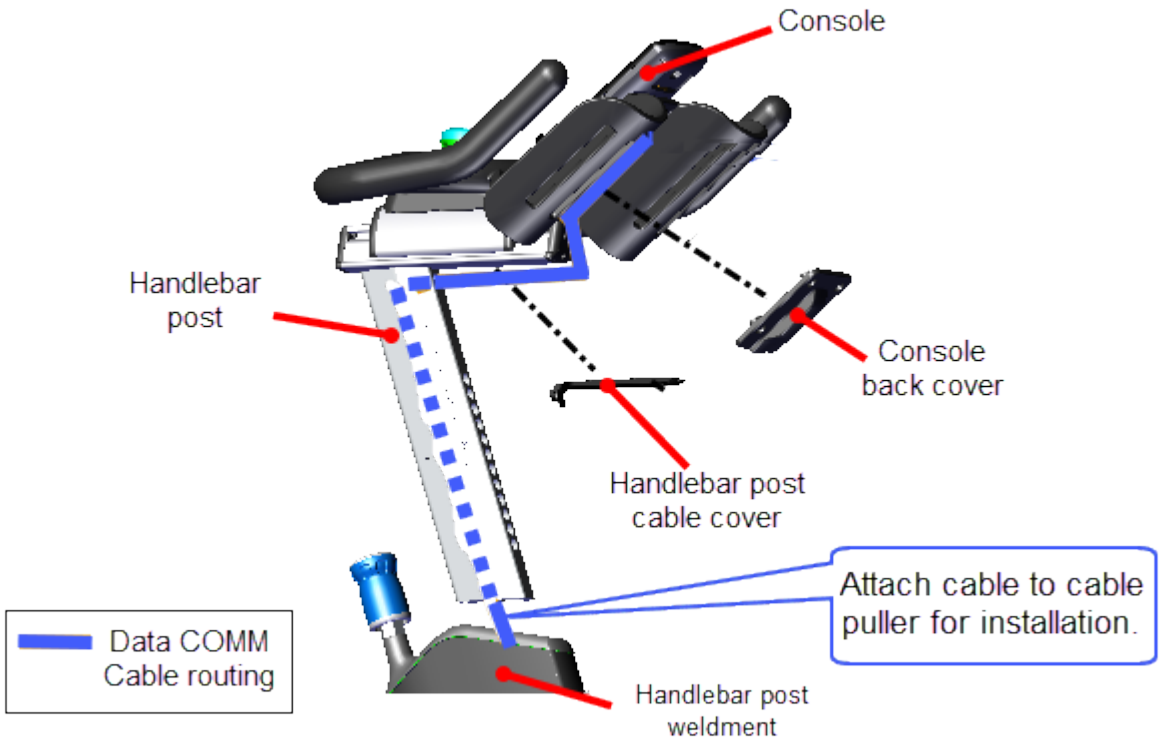
b. Secure the Data COMM cable and Strain Gauge cables to the right fork weldment lower push-mount cable tie:
   - Place the Data COMM cable and Strain Gauge cable into the right fork lower push-pin cable tie. Adjust each cable to the prior marked lower push-pin reference mark (tape or pen) and tighten the cable tie.
   - Alternatively, adjust the Data COMM and Strain Gauge cable lengths to the prior measured length from the LPCA cable connectors to the lower push mount cable tie and then tighten the cable tie. If you did not make these measurements, adjust the Data COMM cable length to approx. 25 in (63.5 cm) and the Strain Gauge cable length to approx. 21 in (53 cm) and tighten the cable tie.



b. Secure the Data COMM cable and Strain Gauge cables to the right fork weldment upper push-mount cable tie at the following conditions:
   - **Strain Gauge cable**: Adjust the Strain Gauge cable so that there is a small amount of slack from the left caliper cable clip across the frame to the right side upper push-mount cable tie.
   - **Data COMM cable**: Pull the Data COMM cable upward thru the upper fork weldment cable access hole until snug. Then secure the cable so that the cable slack will NOT touch or rub against the top of the fly wheel.
   - When both cables are set to the install conditions, tighten the upper push-pin cable tie.

3. Reinstall the Data COMM cable in the handlebar post:
   a. Connect the previously installed cable puller exiting the bottom of the handlebar post to the Data COMM cable - console connector.
   b. Lift the bottom of the handlebar assembly post next to the top of the handlebar post frame weldment.
   c. Grasp the cable puller and gently pull the Data COMM cable upward through the handlebar post. Continue pulling the cable while inserting the handlebar post into the handlebar post frame weldment. Be careful to not pinch or damage the Data COMM cable while installing the handlebar post.
   d. Use the handlebar height adjustment pop-pin to secure the handlebar post in position.
   e. Reinstall the handlebar post cable cover using the two 2.5 mm hex key bolts (2x).

Do not fully tighten the fasteners until after the console has been installed.



4. Position the console on the dash and connect the Data COMM cable. Reinstall the console backplate and secure using the four 4 mm hex key bolts (4x) (see the "SPINNER® CHRONO™ CONSOLE" Operator's Guide). Make sure the Data COMM cable is not pinched or stretched too tight.

5. Adjust the Data COMM cable slack from the console connector to the handlebar post slider until snug and fully tighten the handlebar post cable cover fasteners (2x). Slide extra slack into the handlebar post slider prior to tightening fasteners.
6. Reinstall the flywheel, see "Drive Belt, Generator Belt, and Flywheel Replacement" on page 75.
7. Hand rotate the pedals and verify that the Data COMM cable does NOT touch or rub against the top of the flywheel.
    - If the cable rubs against the flywheel, the Data COMM cable slack must be readjusted so that the cable does not touch the flywheel. This may require removing the flywheel to make adjustments.

CAUTION: Make sure that the Data COMM cable does not rub against the top of the flywheel. Readjust cable slack as necessary.

8. Ride the bike and verify that the console powers on and is operating normally.
    - Make sure the **WATTS**, **RPM**, **TIME**, **DISTANCE**, and **INTERVAL** metrics are reporting correct information.
    - Access the service mode and review the **ERROR LOG**, see "Error Log" on page 147. Make sure there are no current logged error code 30s "Communication issue with the LPCA".
9. Replace the front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38
10. Verify the bike operation, see "Operation Verification Checklist" on page 9 and return to service.

S

Drive Belt, Generator Belt, and Flywheel Replacement

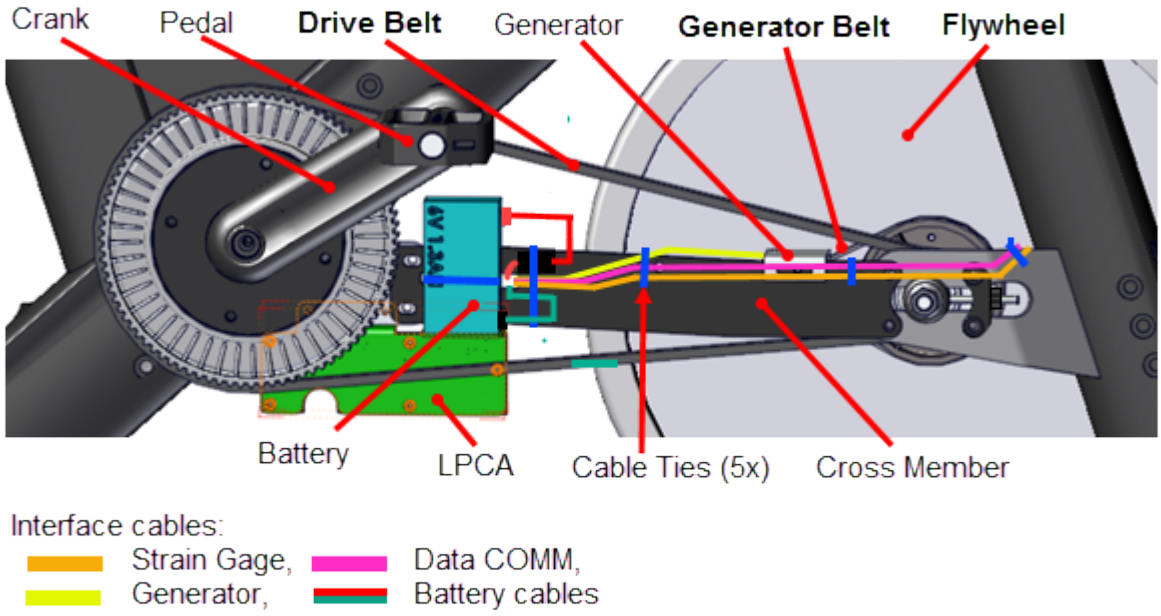
Applies To: (Spinner® Chrono[1]™ Power models only)

About

This procedure provides instruction to remove and install the Drive Belt, Generator Belt, and Flywheel.

Drive belt and generator belt replacement requires removal of the flywheel so this one procedure provides removal and installation procedures for the flywheel, drive belt and generator belt.

WARNING: Personal injury is possible while removing/installing the flywheel. The flywheel weighs approximately 26 lbs (12 kgs) and can pinch or fall onto fingers or other extremities causing personal injury.



Specifications

System Component	Specification
Drive Belt Tension	60 +/- 5 lbs (27 */- 2 kgs)
Generator Belt Tension	1/2 in (1.3 cm) up/dwn travel

[1]Spinner® Chrono™ Power bike.

System Component	Specification
Axle Nut Torque[1]	29.5 ft-lbs (40 Nm)
Flywheel Weight	26 lbs (12 kgs)

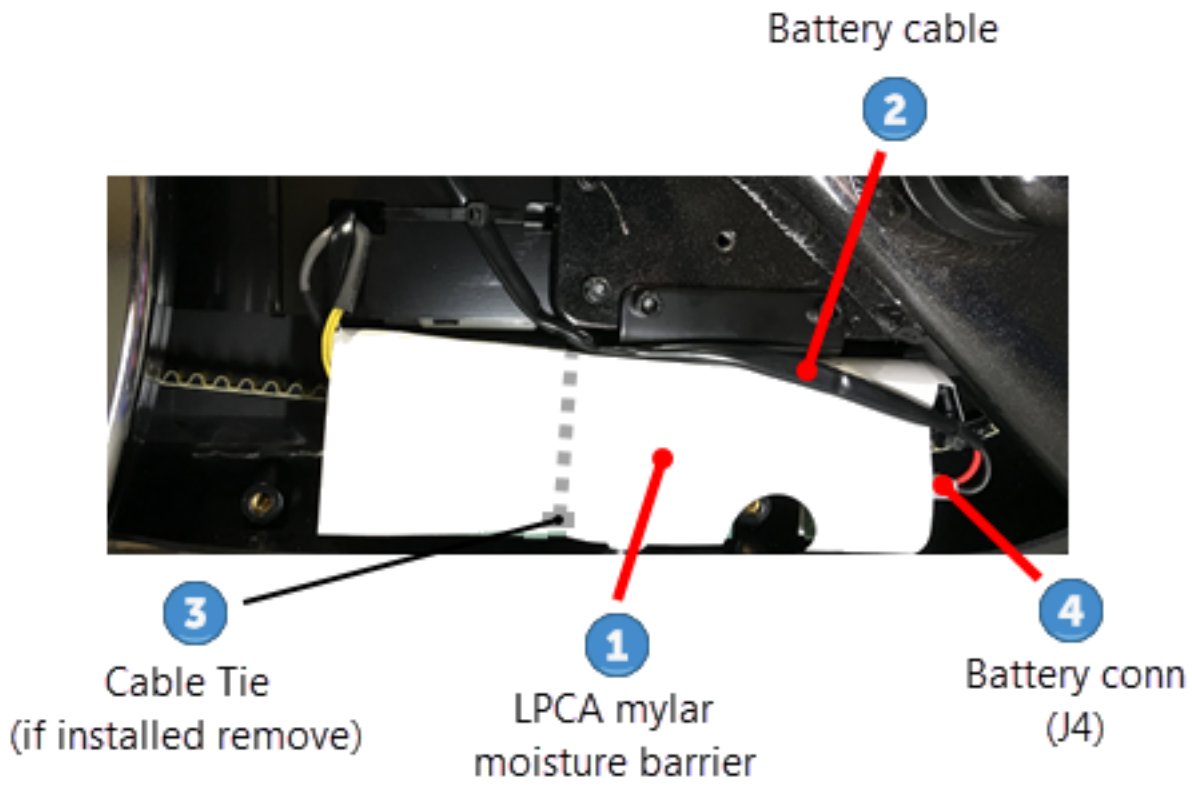
Procedure

Review entire procedure before starting.

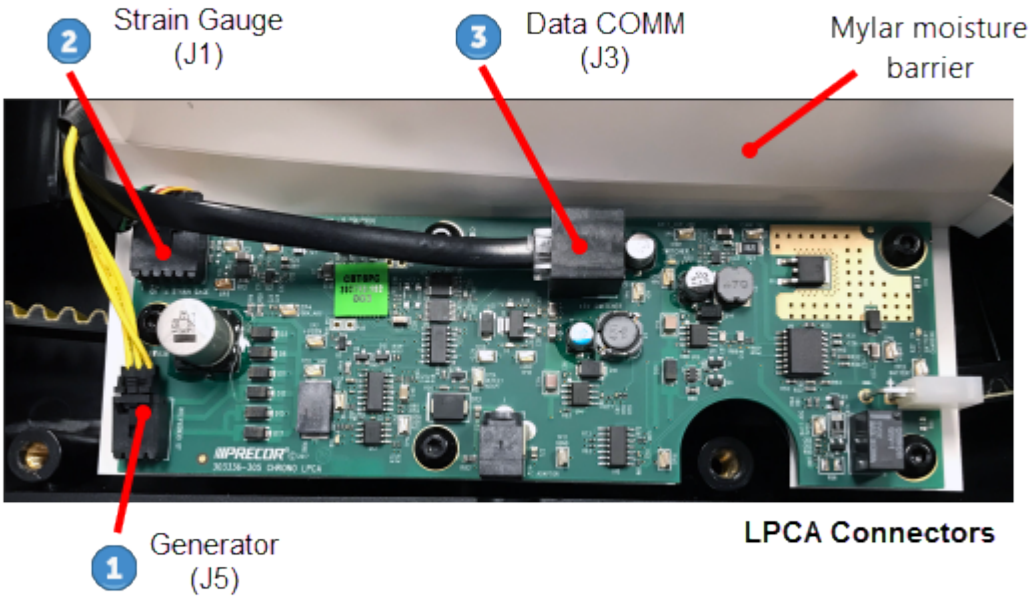
Removal procedure

1. Remove the front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38.
2. Remove all brake pad resistance by turning the resistance knob fully counterclockwise (-).
3. Remove the left and right brake pads, see "Brake Pad Replacement" on page 43.
4. Disconnect the battery cable Black wire from the Negative (-) battery terminal and then the Red wire from the Positive (+) battery terminal, see "Battery Replacement" on page 34 . Disconnect the battery Negative (-) terminal wire first:
5. Disconnect the battery cable 2 from the LPCA[2] battery connector (J4) 4, see the following diagram. (If there is a LPCA moisture barrier 1 cable tie 3 installed, cut, remove, and discard.)

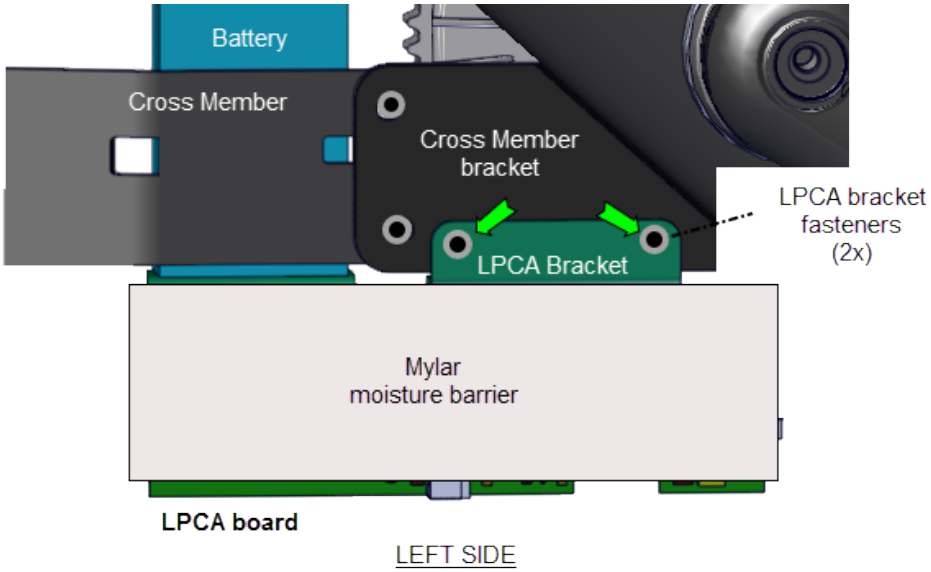
[1]Torque is a measure of the force that can cause an object to rotate about an axis. Bolt/nut example: 5 nM torque is equivalent to 5 newtons of force applied one meter from the center of the bolt, 6 ft-lb is equivalent to 6 lb of force applied 1 foot away from the center of the bolt.
[2]Lower printed circuit assembly; generally this refers to the lower board. On treadmills, this is the motor controller unit (MCU), and on self-powered units, it is the main board in the lower section.



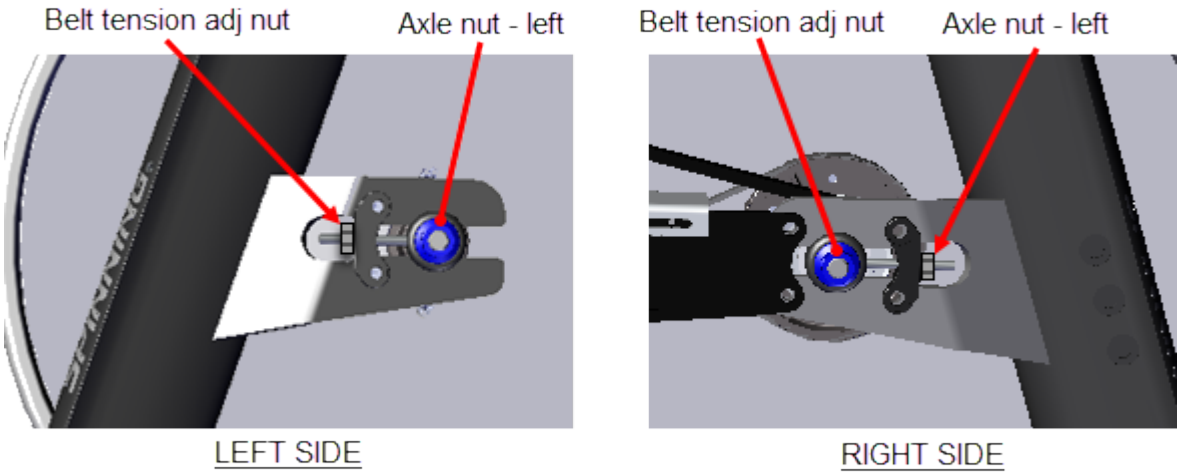
6. Lift the Mylar moisture barrier and disconnect the Generator (J5) 1 cable connector, then the Data COMM (J3) 3 cable connector and last the Strain Gauge (J1) 2 cable connector.



7. Remove the two 4 mm hex key LPCA bracket mounting bolts (2x) and washers (2x) and remove the LPCA bracket. Retain part(s) and/or fastener(s) for installation.

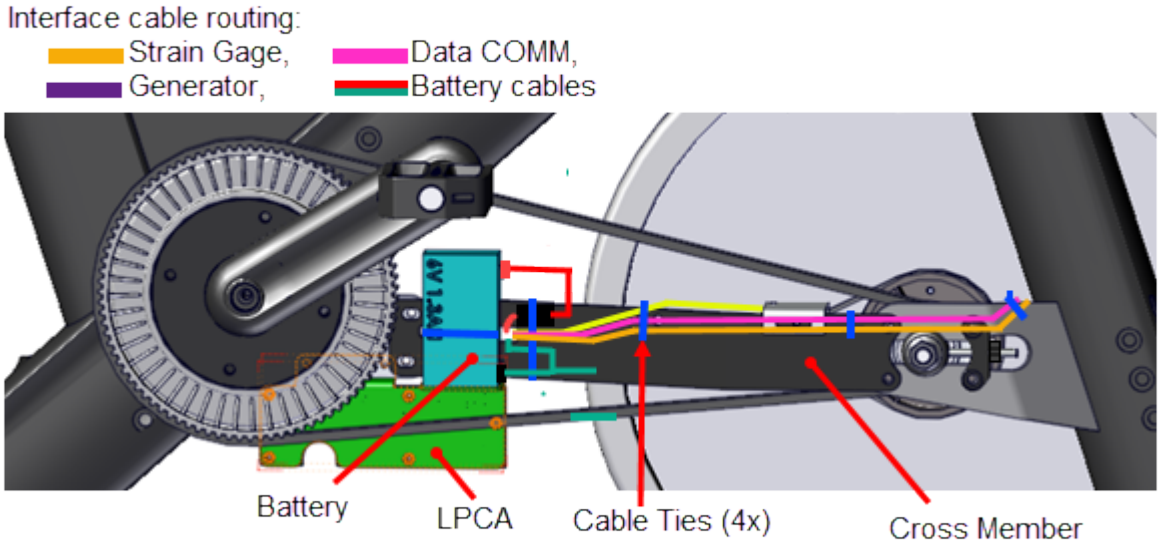


8. Loosen, but do not remove, the left and right 17 mm axle nuts enough to allow flywheel axle movement.

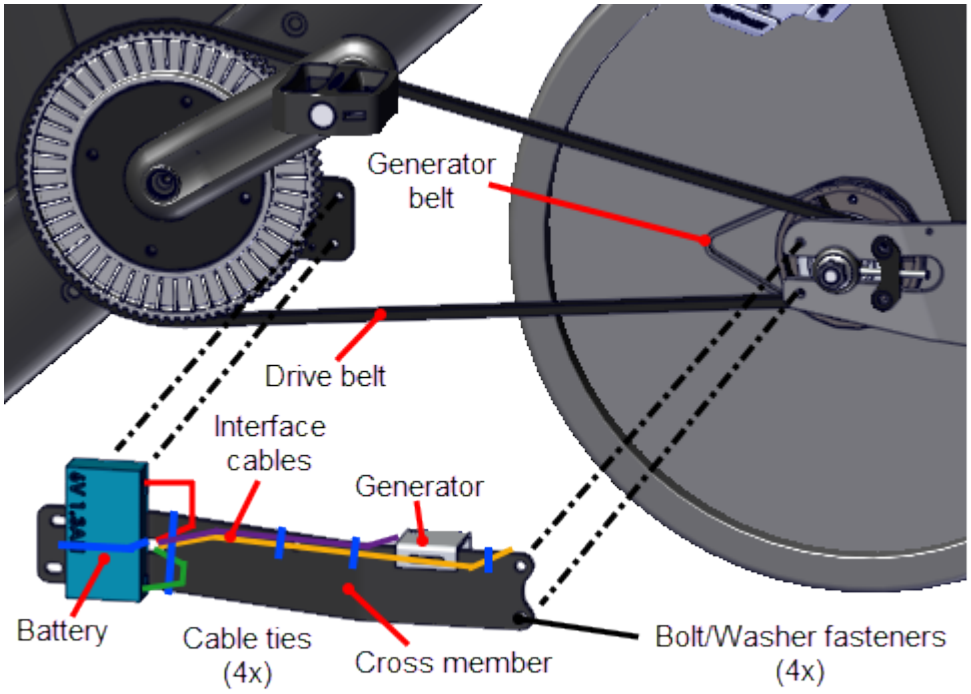


9. Remove drive belt tension by alternately loosening the left and right tension adjustment nuts using a 10 mm wrench. Then fully remove the nuts and retain for installation.
10. Cut the back three cable-ties that secure the generator, data COMM, strain gauge (Spinner® Chrono™ Power models only), and battery cables to the cross member.

TIP: It is not absolutely necessary to remove the back three cable ties from the cross member during flywheel removal and installation. However, care must be taken to not damage the cables when setting the cross member to the side.



11. Remove the frame cross member four 6 mm hex key bolts (4x) and washers (4x) and remove the cross member. Remove the generator belt from the generator pulley and then carefuly set the cross member to the side taking care to not damage the cables



12. Remove the flywheel (weight: 26 lbs (12 kgs)) by carefuly sliding it rearward off the frame axle brackets.

WARNING: Personal injury is possible while removing/installing the flywheel. The flywheel weighs approximately 26 lbs (12 kgs) and can pinch or fall onto fingers or other extremities causing personal injury.

Drive belt removal

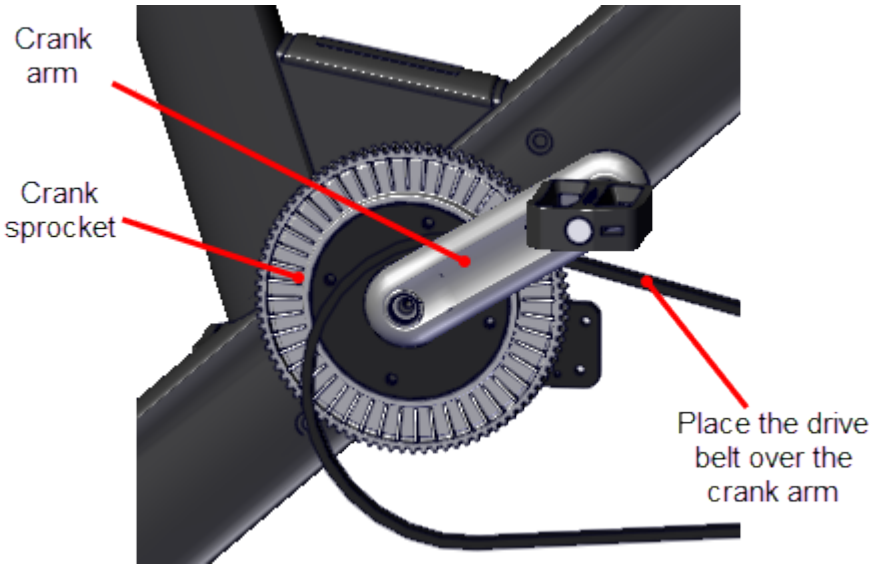
13. Remove the drive belt by carefuly removing the belt off the flywheel pulley and then sliding the belt over the crank sprocket and pedal.

Generator belt removal

14. Remove the generator belt from the flywheel generator pulley.

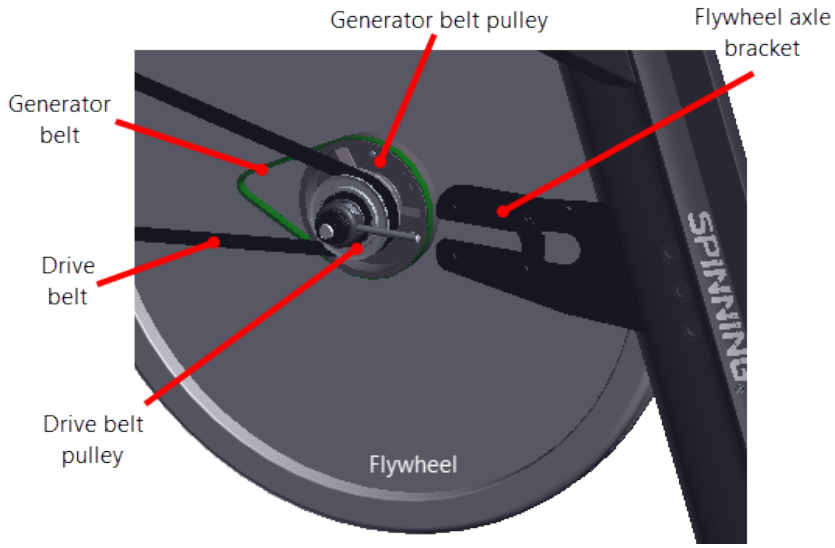
Installation procedure.

1. Place the drive belt over the pedals and rest it on the crank.



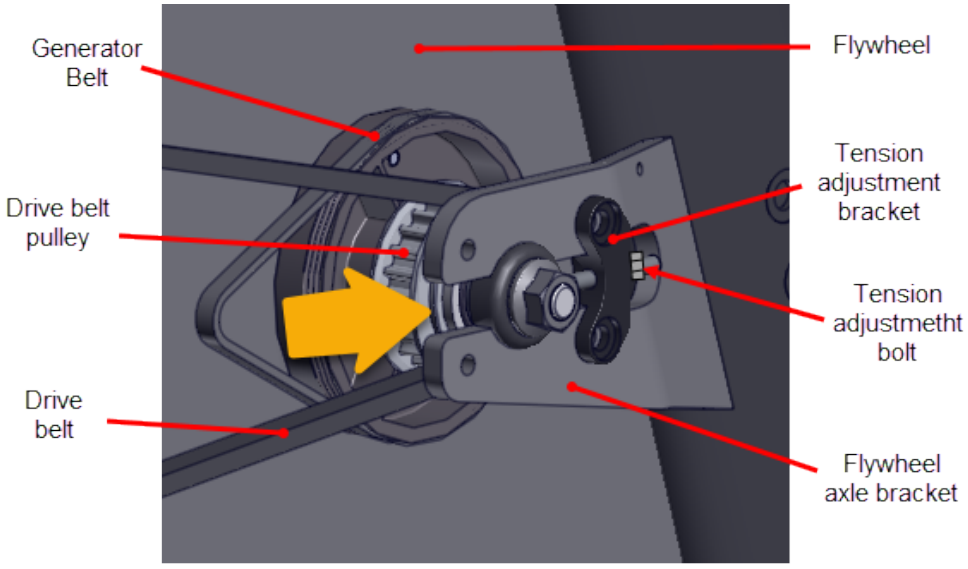
2. Position the flywheel in front of the flywheel axle bracket. Then put the generator belt onto the flywheel generator pulley and the drive belt onto the flywheel drive pulley.

IMPORTANT: The generator and drive belts must be placed onto the flywheel generator and drive belt pulleys before installing the flywheel onto the axle mounting bracket.



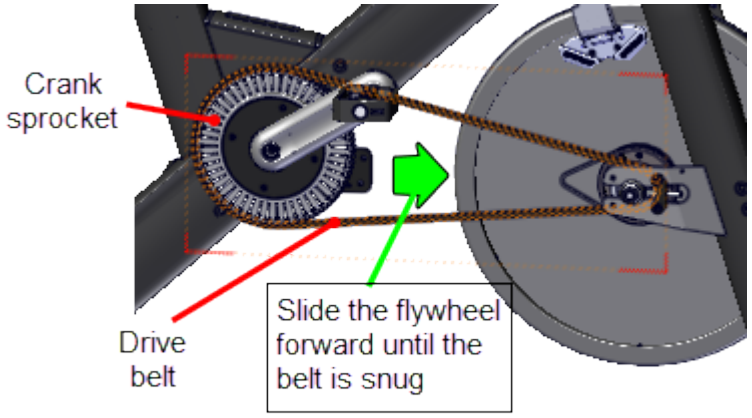
3. Reinstall the flywheel by carefuly sliding the flywheel axle into the frame axle brackets. The belt tension adjustment bolts need to be aligned so that they slide thru the bolt holes

in the tension adjustment bracket.



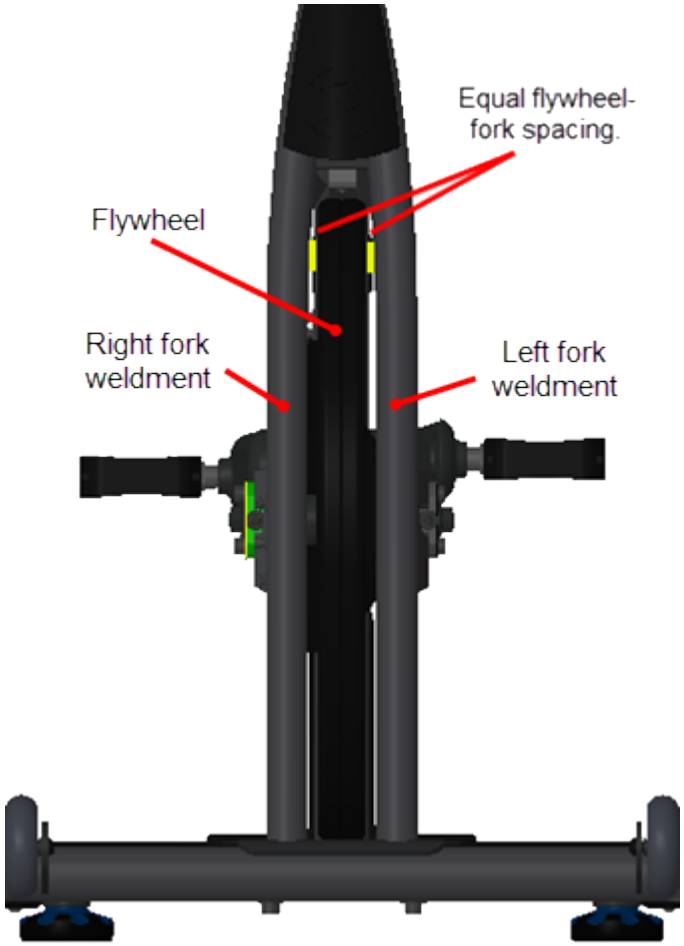
TIP: You may find it is easier to stand the bike frame on its front (resting on the front stabilizer and handlebar) and then installing the flywheel into the axle mounting slots. The weight of the flywheel will help to slide the flywheel into the mounting slots. Carefully hold the flywheel and return bike to the upright position.

4. Place the drive belt onto the crank sprocket and flywheel pulley.

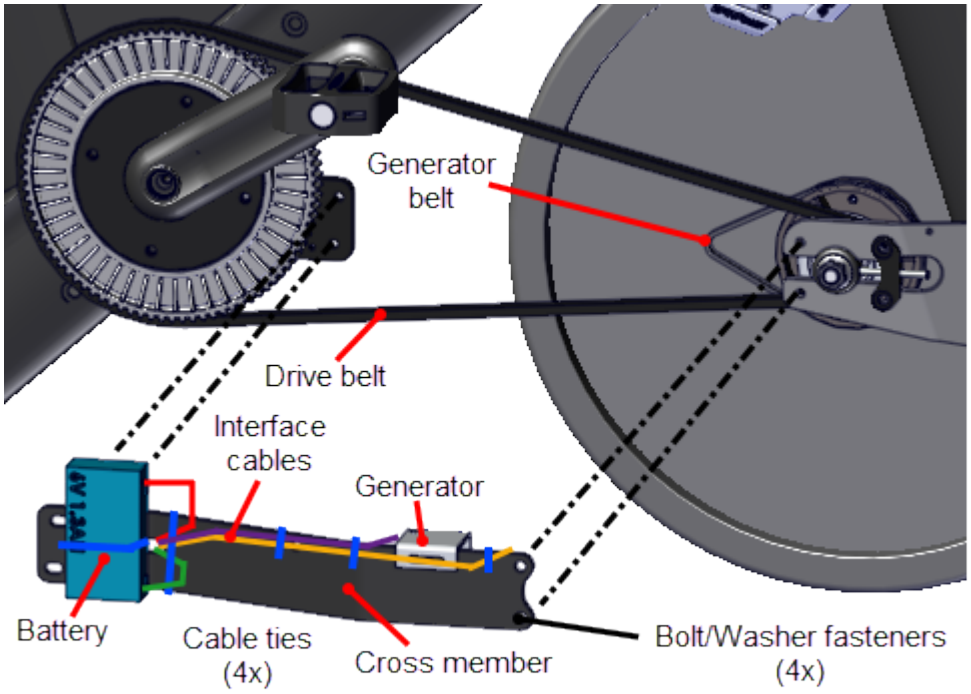


5. Continue to slide the flywheel forward until the drive belt tension is snug and the belt teeth seat properly into the crank sprocket and flywheel pulley. Install the left and right tension adjustment bolts until snug. Adjust the left tension bolt so that the flywheel rim is centered between the left and right front forks (do not fully tension the belt at this step).

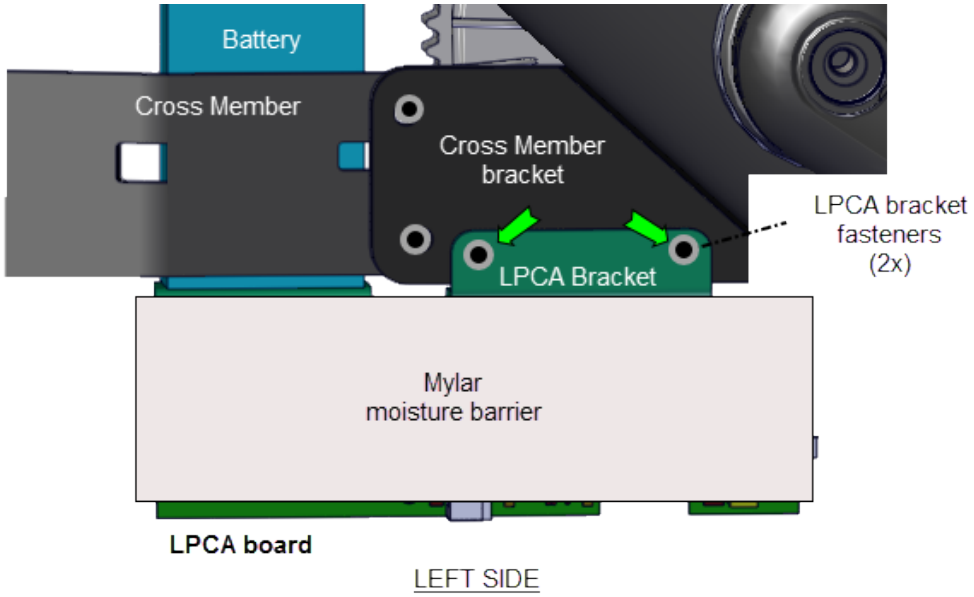
CAUTION: Thread the belt tension nuts onto the tension adjustment bolts to prevent the flywheel from accidentally falling off the flywheel axle bracket.



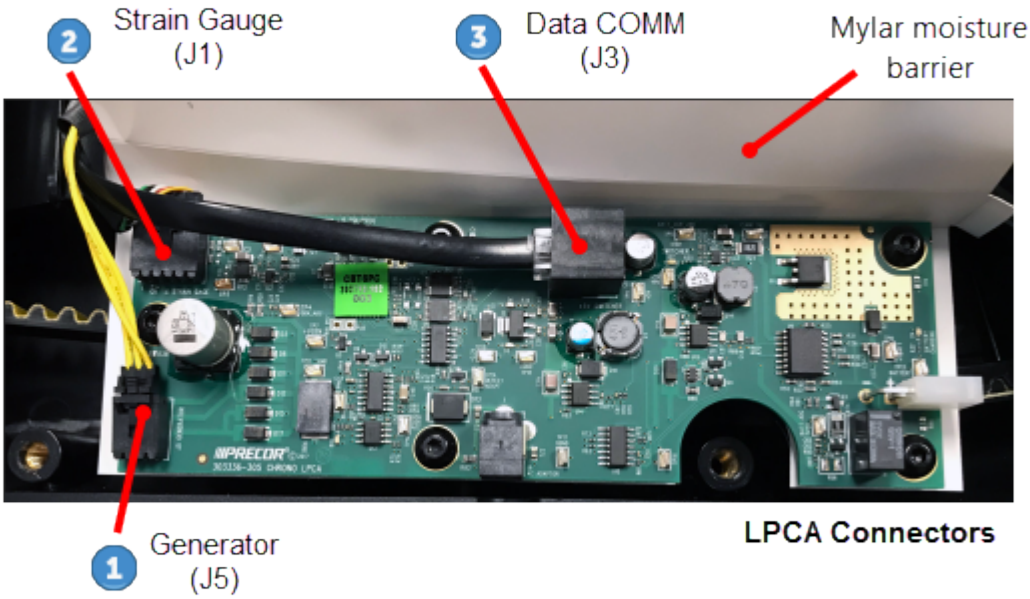
6. Reinstall the frame cross member using a 6 mm hex key to secure the four bolts (4x) and washers (4x). Fully tighten the four fasteners.



7. Place the LPCA bracket into position on the frame cross member bracket and secure using the two 4 mm hex key bolts (2x) and washers (2x). Fully tighten the fasteners.

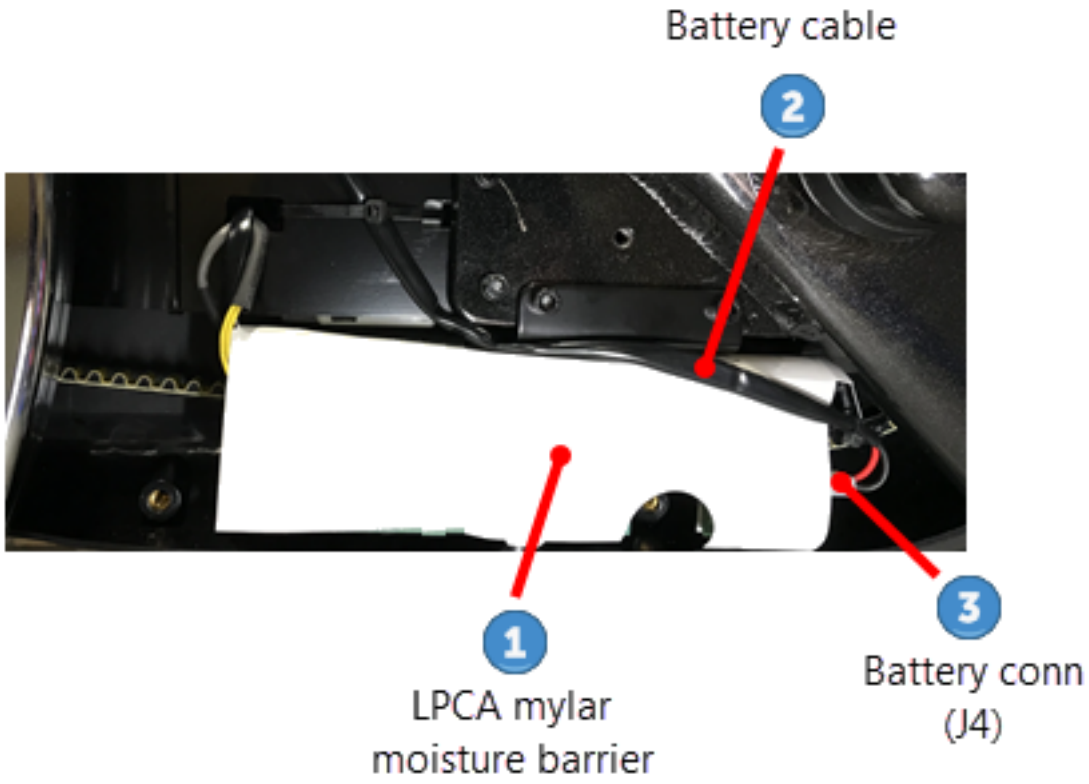


8. Reconnect the Strain Gauge (J1) 2 cable connector, then the Data COMM (J3) 3 cable connector and last the Generator (J5) 1 ,cable connector.



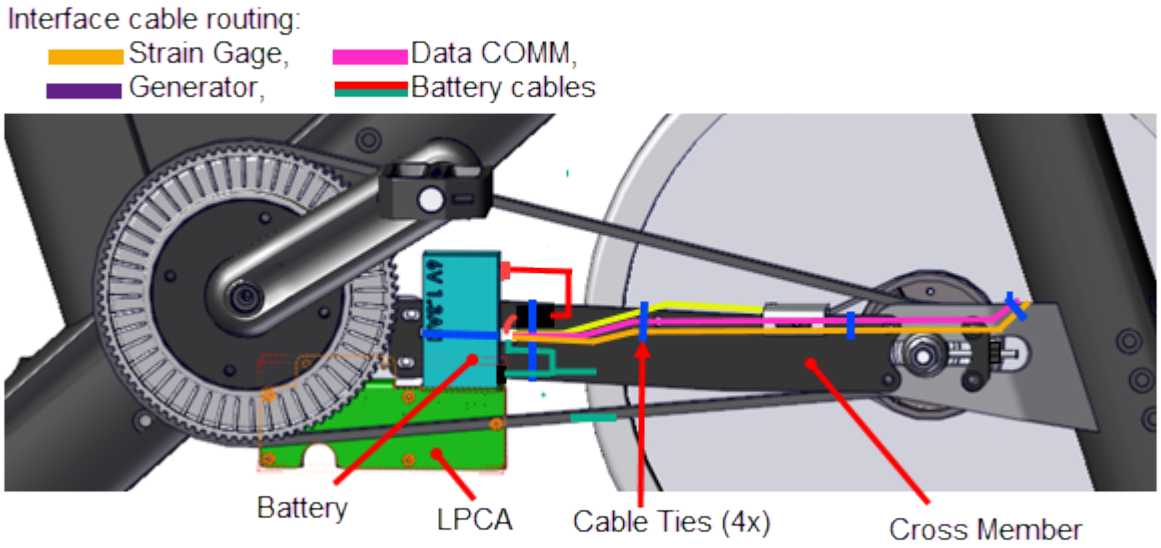
LPCA Connectors

9. Fold the Mylar moisture barrier over the front of the LPCA and route the battery cable over the moisture barrier and reconnect to the LPCA battery cable connector (J4) 4.

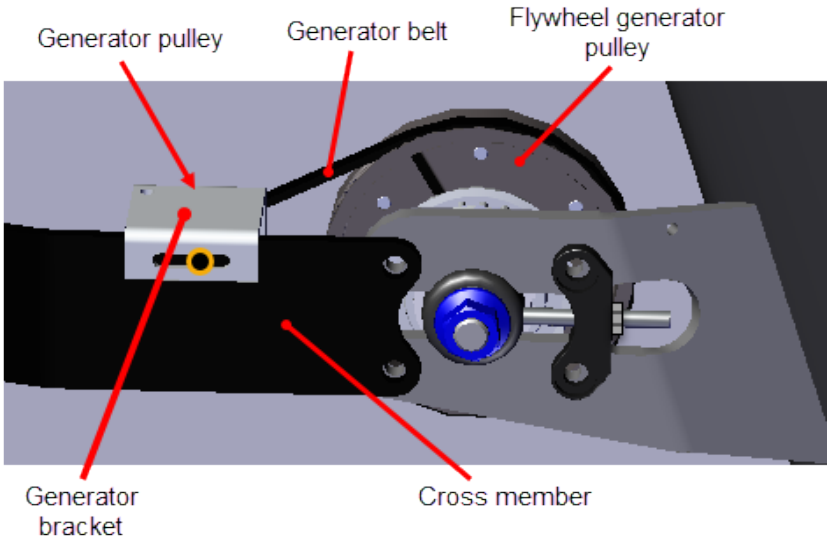


Note: The zip tie that removed and used to hold the Mylar moisture barrier over the LPCA board is not required to be replaced.

10. (Spinner® Chrono™ Power models only)
    If the cross member cable ties were removed, replace them with new cable ties to secure the generator, data COMM, strain gauge , and battery interface cables to the cross member (4x locations).



11. Place the generator belt onto the generator and flywheel generator pulleys. Place the belt onto the smaller generator pulley and walk the belt onto the larger flywheel generator pulley



12. Adjust the drive belt tension and tracking to specification, go to "Drive Belt Tension and Tracking Adjustment" on page 19

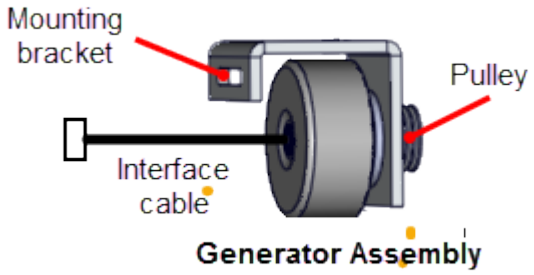
13. If the axle nuts were not previously tightened to specification, tighten the left and right axle nuts torque to 29.5 ft-lbs (40 Nm).
14. Adjust the generator belt tension to 1/2 in (1.3 cm) up/dwn travel, see "Generator Belt Tension Adjustment" on page 27 .
15. Install the left and right brake pads and adjust the brake pad gap to specification, see "Brake Pad Replacement" on page 43.
16. Replace front and rear belt guard covers in reverse order, see "Belt Guard Cover Replacement" on page 38.
17. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

Generator Assembly Replacement

Applies To: (Spinner® Chrono[1]™ Power models only)

About

This procedure provides instruction to remove and install the Generator Assembly.



Specifications

System Component	Specification
Generator Belt Tension	1/2 in (1.3 cm) up/dwn travel
Generator Output	Voltage: approx. 9 Vac @ 60 rpm Current: approx. 0.4 amps @ 60 rpm

Procedure

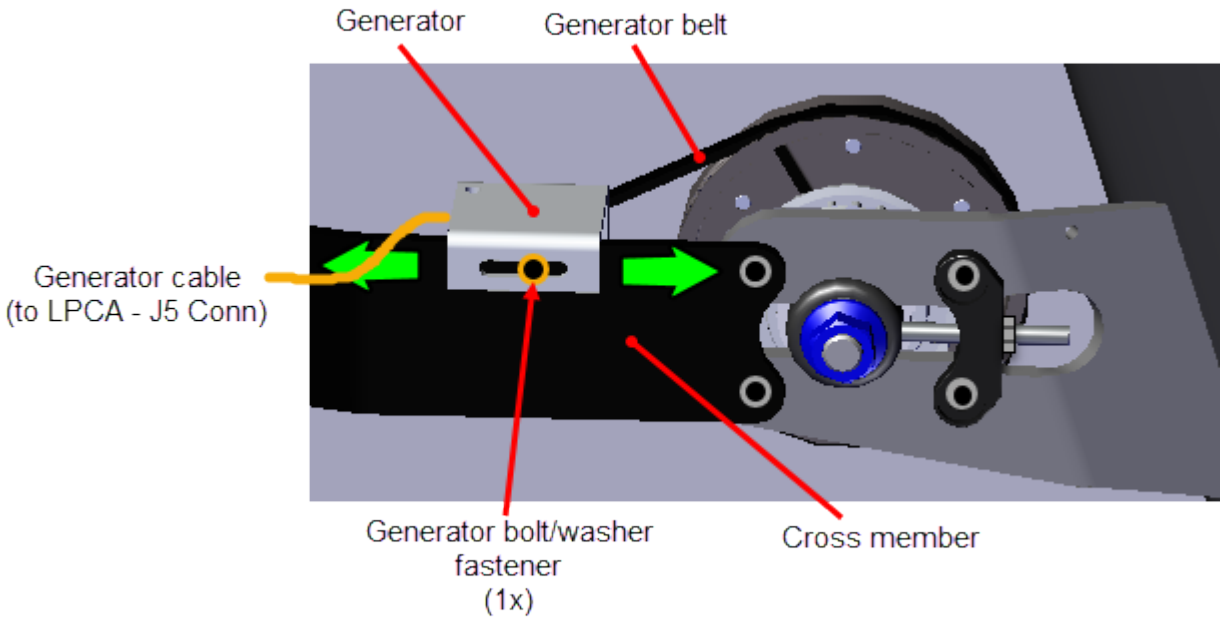
Review entire procedure before starting.

Removal procedure

1. Remove the front and rear drive belt covers, see "Belt Guard Cover Replacement" on page 38.
2. Remove all brake resistance by turning the resistance knob counter clockwise (-).
3. Disconnect the generator interface cable from the LPCA[2] - 5 connector. Cut the two cable ties that hold the cable to the cross member and remove.

[1]Spinner® Chrono™ Power bike.

[2]Lower printed circuit assembly; generally this refers to the lower board. On treadmills, this is the motor controller unit (MCU), and on self-powered units, it is the main board in the lower section.



4. Loosen the generator 4 mm hex key mounting bolt enough so that the generator can be moved forward. Move the generator forward to loosen tension and remove the belt off the generator pulley.
5. Remove the 4 mm hex key bolt and washer mounting fasteners and remove the generator.

Installation procedure

1. Install the generator onto the cross member and secure using the 4 mm hex key bolt and washer fasteners. Loosely tighten the fasteners allowing forward and rearward movement.
2. Install the generator belt onto the generator and flywheel generator pulleys.
3. Route the generator interface cable across the cross member and connect to the LPCA - J5 connector. Reinstall the previously removed two cable ties that hold the generator and other electrical component interface cables to the cross member.
4. Adjust the generator belt tension see "Generator Belt Tension Adjustment" on page 27.

CAUTION: Do not over tension the belt which will lead to premature belt wear and possible damage to the generator pulley.

5. Access the console service test menu and select **RPM**. Pedal the bike and verify that the RPMs value is showing and varies with pedal speed.

Note: RPM is computed from pin 3 of the generator cable connector. If this generator output phase has quite working, the console may not operate and will not display **RPM**.

6. Ride and pedal the bike at 60 rpms and verify that the generator is providing the specified charging voltage and current. Access the console service test menu and verify the generator voltage and current outputs:
   - GEN VOLT: approx. 9 Vac @ 60 rpm (voltage will increase as rpms increase)
   - GEN AMP: approx. 0.4 amps @ 60 rpm (current will increase as rpms increase)
7. Reinstall the front and rear drive belt covers, see "Belt Guard Cover Replacement" on page 38.
8. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

.See Also

"Replacement Procedures" on page 32

Handlebar Assembly Replacement

About

This procedure provides instruction to remove and install the Handlebar Assembly.

Procedure

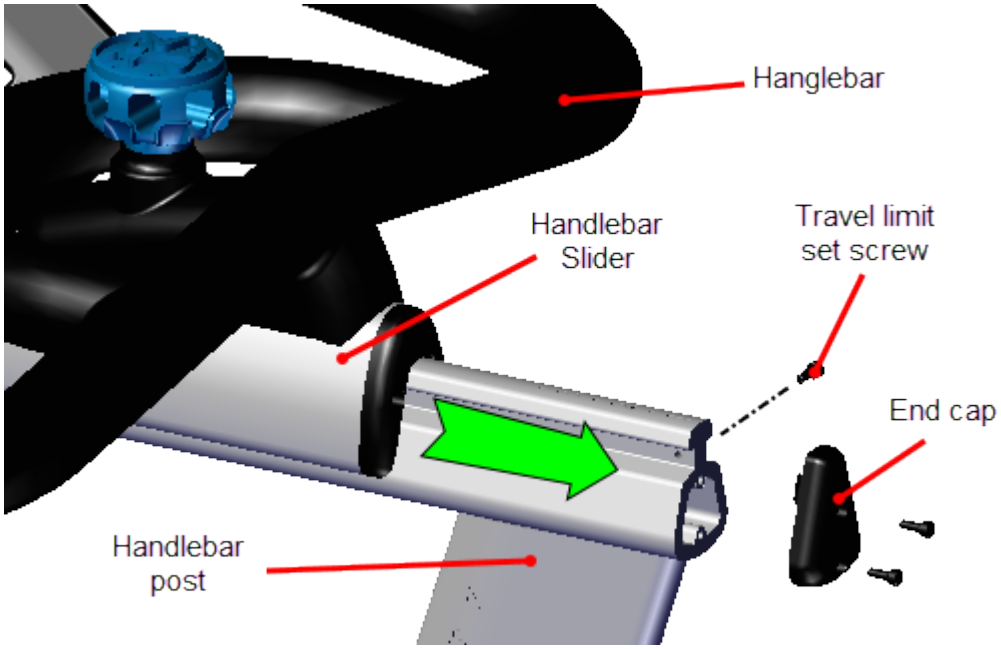
Review entire procedure before starting.

Removal Instructions

1. (Spinner® Chrono[1]™ Power models only)
   Remove the four 4 mm (4x) hex key bolts and remove the console backplate cover. Disconnect the data COMM cable from the console and set the console aside, see the "SPINNER® CHRONO™ CONSOLE" Operator's Guide.

2. Remove the rear handlebar post slider end cap by removing the two 2.5 mm hex key bolts. Retain for installation.

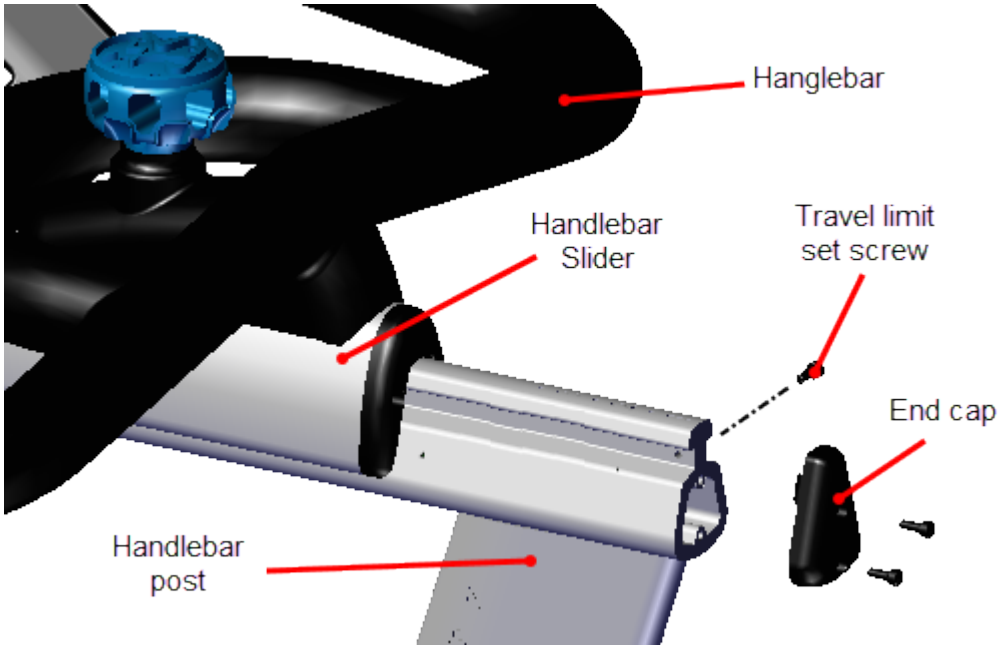
[1]Spinner® Chrono™ Power bike.



3. Slide the handlebar forward enough to allow access to handlebar assembly travel limit set screw located at the back end of the handlebar post slider. Remove the rear slider travel limit set screw using a 2.5 mm hex key. Retain part(s) and/or fastener(s) for installation.
4. Remove the handlebar assembly by loosening and lifting up on the fwd/back adjustment knob while sliding the assembly towards the back of the bike.

Installation instructions

1. Loosen the fwd/back adjustment knob and then reinstall the handlebar assembly by sliding the assembly rearwards onto the handlebar post.



2. Slide the handlebar forward enough to allow access to handlebar assembly travel limit set screw located at the back end of the handlebar post slider. Reinstall the rear slider travel limit set screw using a 2.5 mm hex key.
3. Reinstall the rear handlebar post slider end cap and secure using the two mounting 2.5 mm hex key bolts.
4. (Spinner® Chrono™ Power models only)
   Position the console on the handlebars and connect the data COMM cable. Adjust the cable slack and reinstall the console backplate, secure using the four hex key bolts (4x) (see the "SPINNER® CHRONO™ CONSOLE" Operator's Guide).

5. Verify the handlebar forward/back travel is smooth and that the handlebar slider is stopped from sliding off the post slider by the travel limit screw. For Spinner® Chrono™ Power models, verify the data COMM cable has enough slack for handlebar minimum to maximum travel adjustment.
6. Verify the handlebar adjustment knob operation and that it holds the handlebar in position.

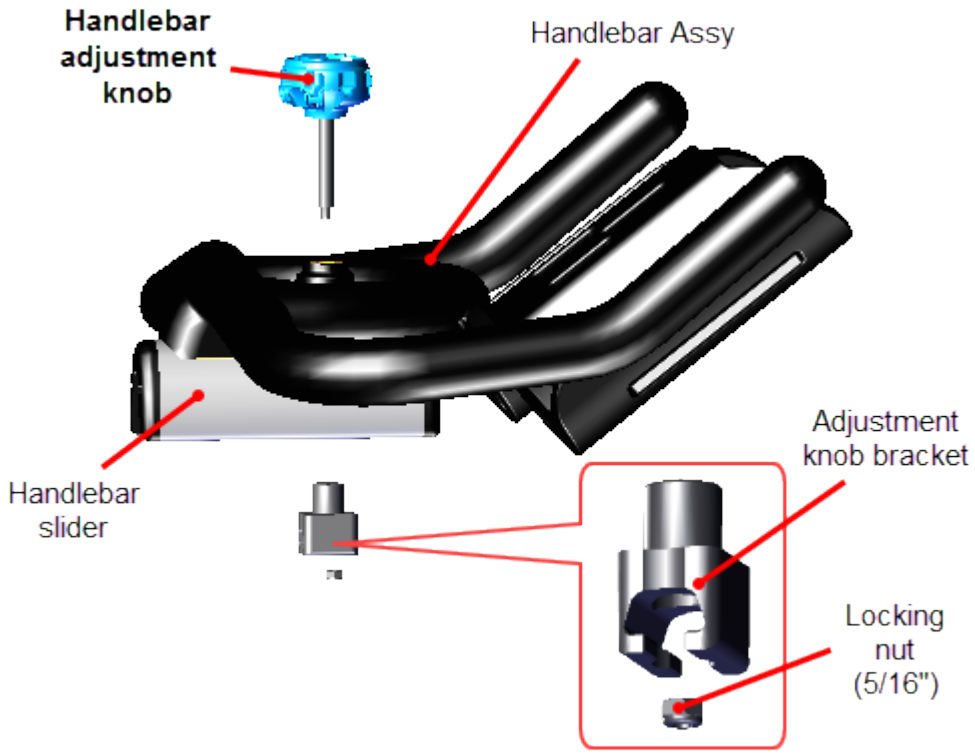
See Also

"Handlebar Adjustment Knob Replacement" on the facing page

Handlebar Adjustment Knob Replacement

About

This procedure provides instruction to remove and install the Handlebar Adjustment Knob.

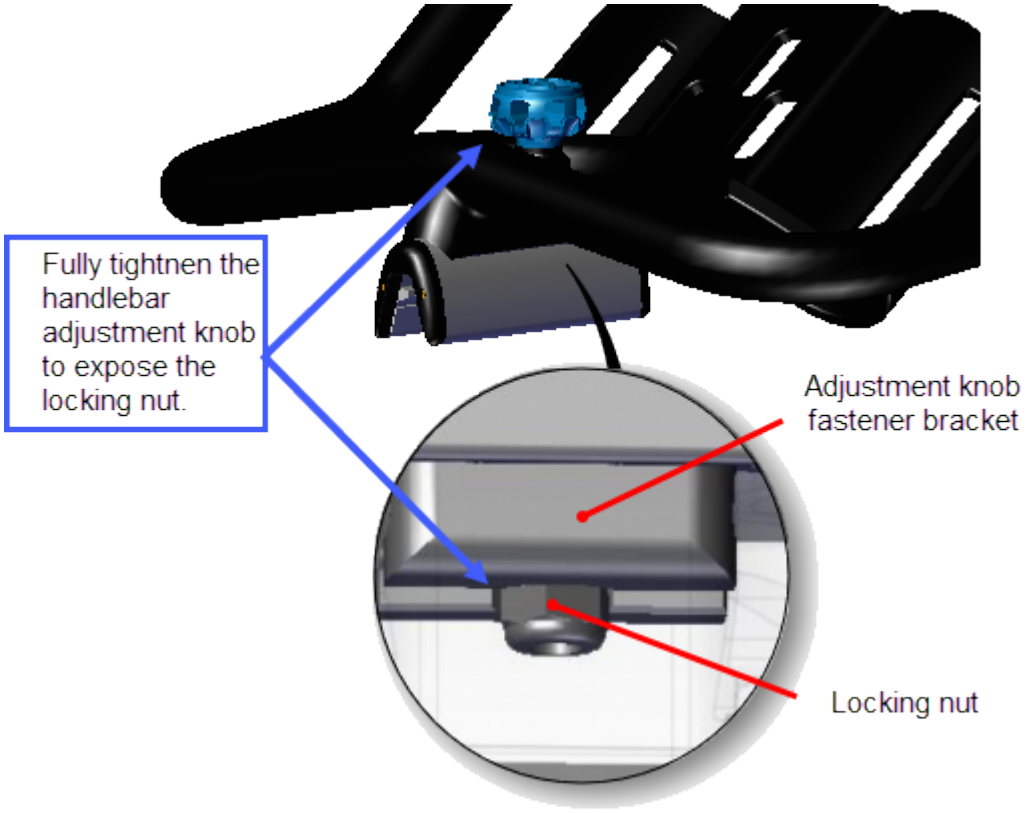


Procedure

Review entire procedure before starting.

Removal Instructions

1. Remove the handlebar assemble, see "Handlebar Assembly Replacement" on page 91.
2. Fully tightening the handlebar adjustment knob. This will push the locking nut slightly above the bottom edge of the adjustment knob bracket mounting hole enough to place a thin wall deep socket onto the 5/16" locking nut.



3. Then use a thin wall deep 5/16' socket to hold the locking nut from turning while loosening the adjustment knob to remove. Keep light pressure on the adjustment knob while loosening.

Installation instructions

1. Reinstall the handlebar adjustment knob in reverse order.
2. Reinstall the handlebar assembly and verify the handlebar adjustment knob operation, see "Handlebar Assembly Replacement" on page 91.

See Also

"Replacement Procedures" on page 32

Handlebar Post Removal

About

This procedure provides instruction to remove and install the handlebar Post.

For Spinner® Chrono[1]™ Power models, the data COMM cable must be removed from the inside the handle bar post weldment to remove the handlebar post.

Select procedure:

- Spinner® Chrono™ Power
- Spinner® Climb™

Procedure - (Spinner® Chrono™ Power models only)

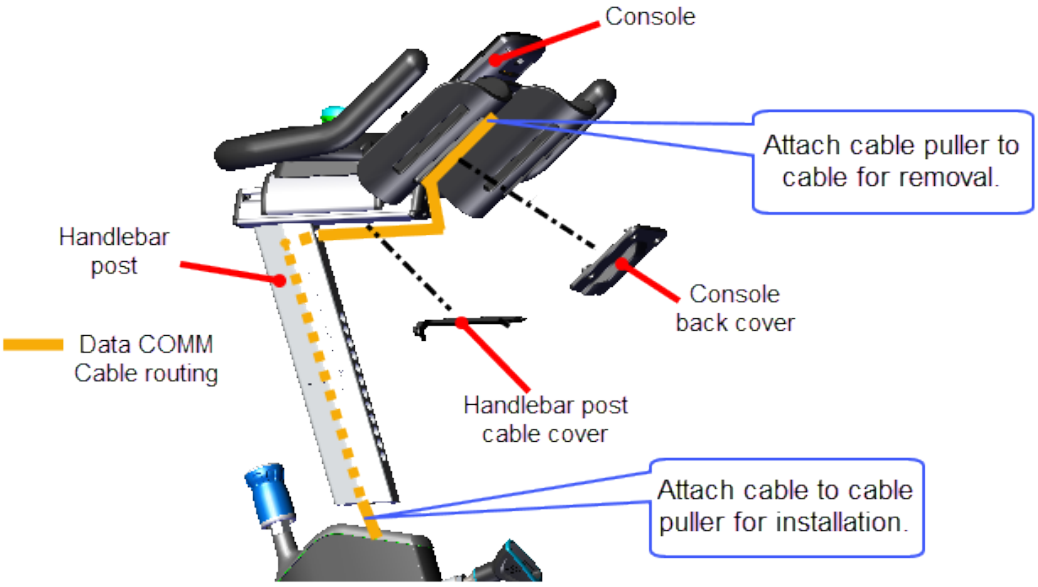
Review entire procedure before starting.

Removal

1. Remove the four 4 mm (4x) hex key bolts and remove the console backplate cover. Disconnect the data COMM cable from the console and set the console aside, see the "SPINNER® CHRONO™ CONSOLE" Operator's Guide.

[1]Spinner® Chrono™ Power bike.

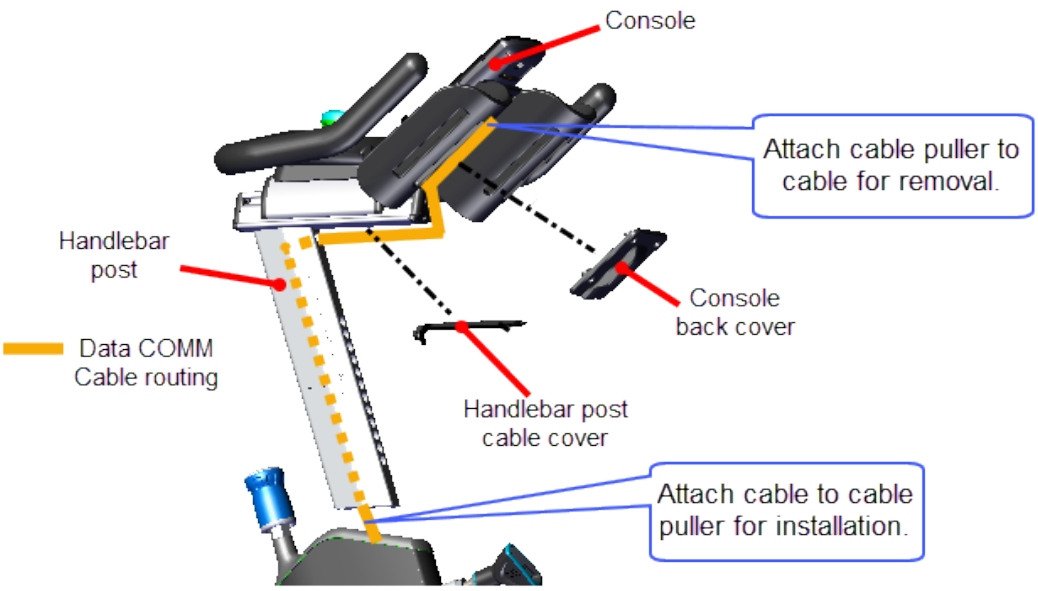
2. Remove the data COMM cable from the handlebar assembly:
    a. Remove the two 2.5 mm hex key bolts (2x) and remove the handlebar post cable cover.
    b. Attach a cable puller to the console connector end of the data COMM cable.
    c. Pull the handlebar height adjust pop pin and carefuly lift the handlebar post from the top of the frame weldment. While holding the handlebar assembly, gently pull the data COMM cable and attached cable puller from the inside of the handlebar post.
    d. Disconnect the data COMM cable from the cable puller and set the handlebar post aside. The cable puller will be used to reinstall the cable through the inside of the handlebar assembly.



Handlebar Post Cable Removal

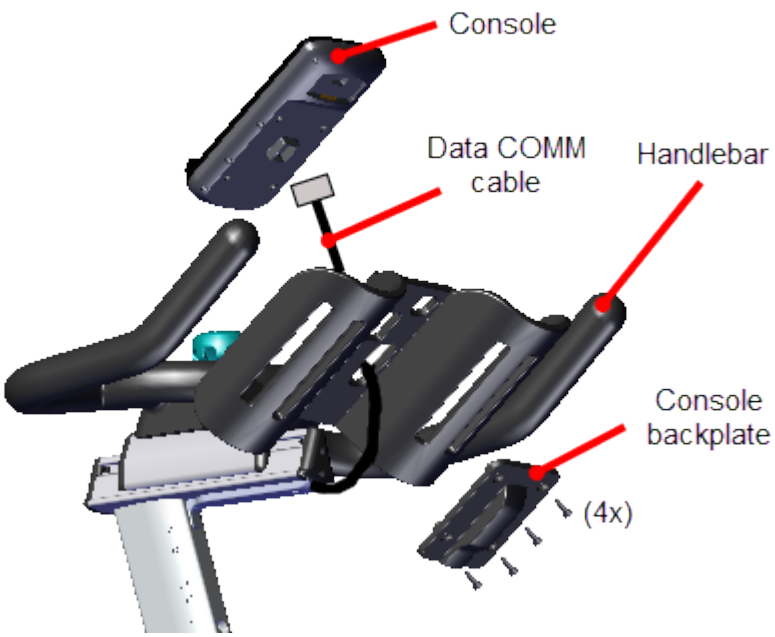
Installation

1. Reinstall the data COMM cable in the handlebar assembly weldment:



Handlebar Post Cable Removal

   b. Connect the data COMM cable console connector to the cable puller exiting from the bottom of the handlebar post.
   c. Lift the handlebar post near to the top of the frame neck weldment.
   d. Install the handlebar post into the frame neck weldment while gently pulling the cable puller and data COMM cable upward through the handlebar post. Make sure to not pinch or damage the data COMM cable during installation.
   e. Pull the handlebar height adjust pop pin to secure the post and to adjust the handlebar height.
   f. Reinstall the handlebar post cable cover using the two 2.5 mm hex key bolts (2x). Do not fully tighten the fasteners until after the console has been installed.
2. Position the console on the handlebars and connect the data COMM cable. Adjust the cable slack and reinstall the console backplate, secure using the four hex key bolts (4x) (see the "SPINNER® CHRONO™ CONSOLE" Operator's Guide).



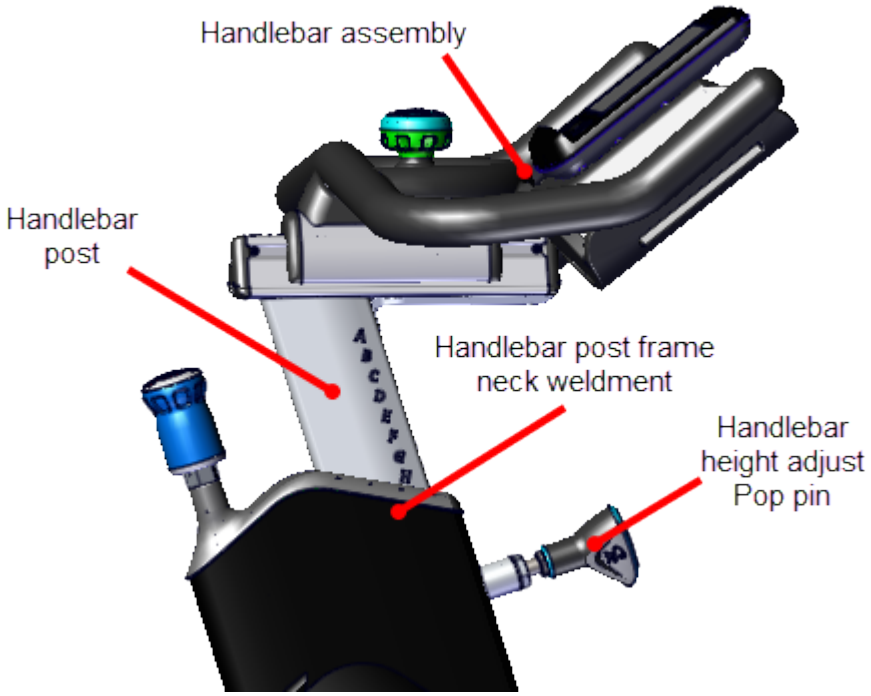
3. Make final adjustments to the data COMM cable slack and fully tighten the fasteners handlebar post cable cover.
4. Ride the bike and verify that the console powers on and is operating normally.
    - Make sure the **WATTS**, **RPM**, **TIME**, **DISTANCE**, and **INTERVAL** metrics are reporting correct information.
5. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

Procedure - (Spinner® Climb™ models only)

Review entire procedure before starting.

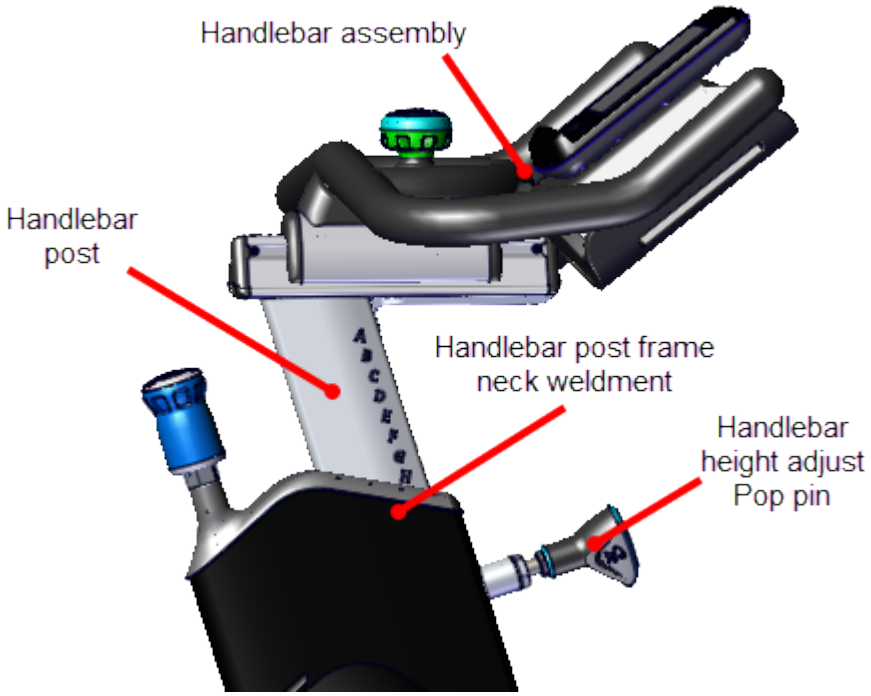
Removal

1. Pull the handlebar height adjust pop pin and carefuly lift the handlebar post from the top of the frame weldment, see the Operator's Guide for more information.



Installation

1. Reinstall the handlebar post into the frame neck weldment



2. Pull the handlebar height adjust pop pin to secure the post and to adjust the handlebar height, see the Operator's Guide for more information.
3. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

See Also

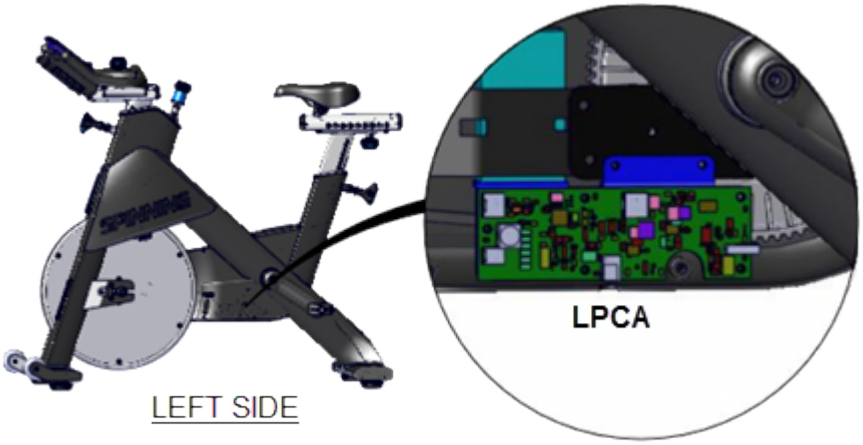
"Replacement Procedures" on page 32

LPCA board Replacement

Applies To: (Spinner® Chrono[1]™ Power models only)

About

This procedure provides instruction to remove and install the LPCA[2] (Lower PCA[3]) board.

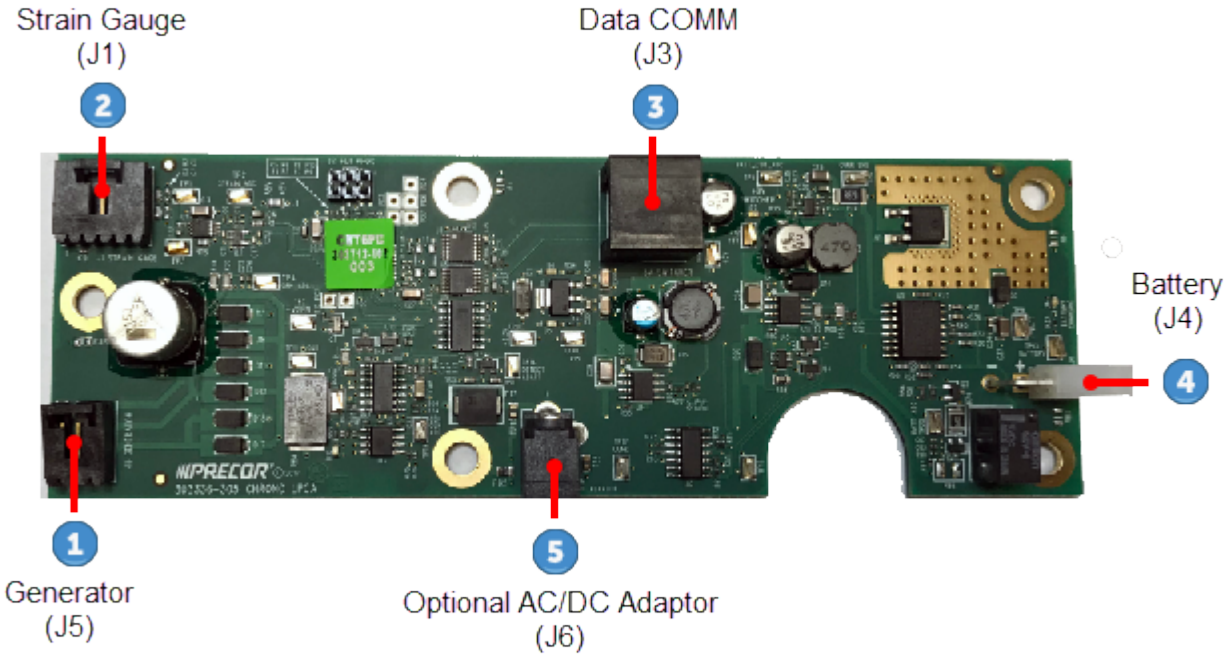


[1]Spinner® Chrono™ Power bike.

[2]Lower printed circuit assembly; generally this refers to the lower board. On treadmills, this is the motor controller unit (MCU), and on self-powered units, it is the main board in the lower section.

[3]Lower printed circuit assembly; generally this refers to the lower board. On treadmills, this is the motor controller unit (MCU), and on self-powered units, it is the main board in the lower section.

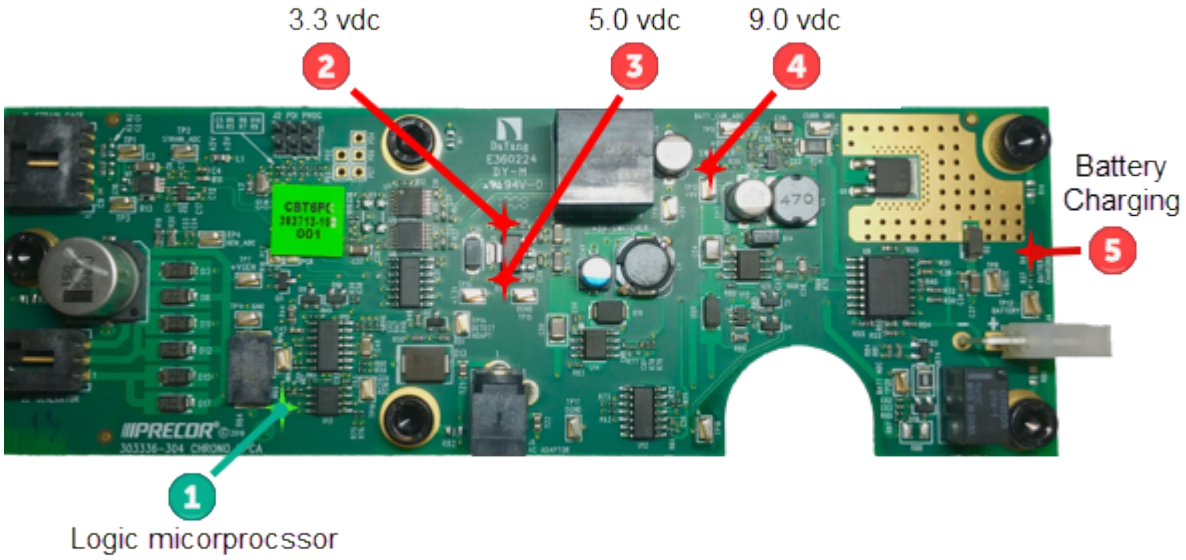
LPCA Interface Cable Connections



ID	Interface Cables
1	Generator (J5)
2	Strain Gauge(J1)
3	Data COMM(J3)
4	Battery (J4)
5	Optional AC[1]/DC[2] Power Adapter(J1)

[1]Alternating Current: electric current which periodically reverses direction between positive and negative polarity.
[2]Direct Current: electrical current that only flows in one direction.

LPCA Status LEDs



ID	LED Description
1	Logic microprocessor ON (flashes green)
2	3.3 Vdc supply (red)
3	5 Vdc supply (red)
4	9 Vdc supply (red) (while pedaling or AC/DC adapter plugging in)
5	Battery Charging (red) • ON ≥ 55 rpm (charging battery) •OFF ≥ 55 rpm and battery fully charged •OFF < 55 rpm

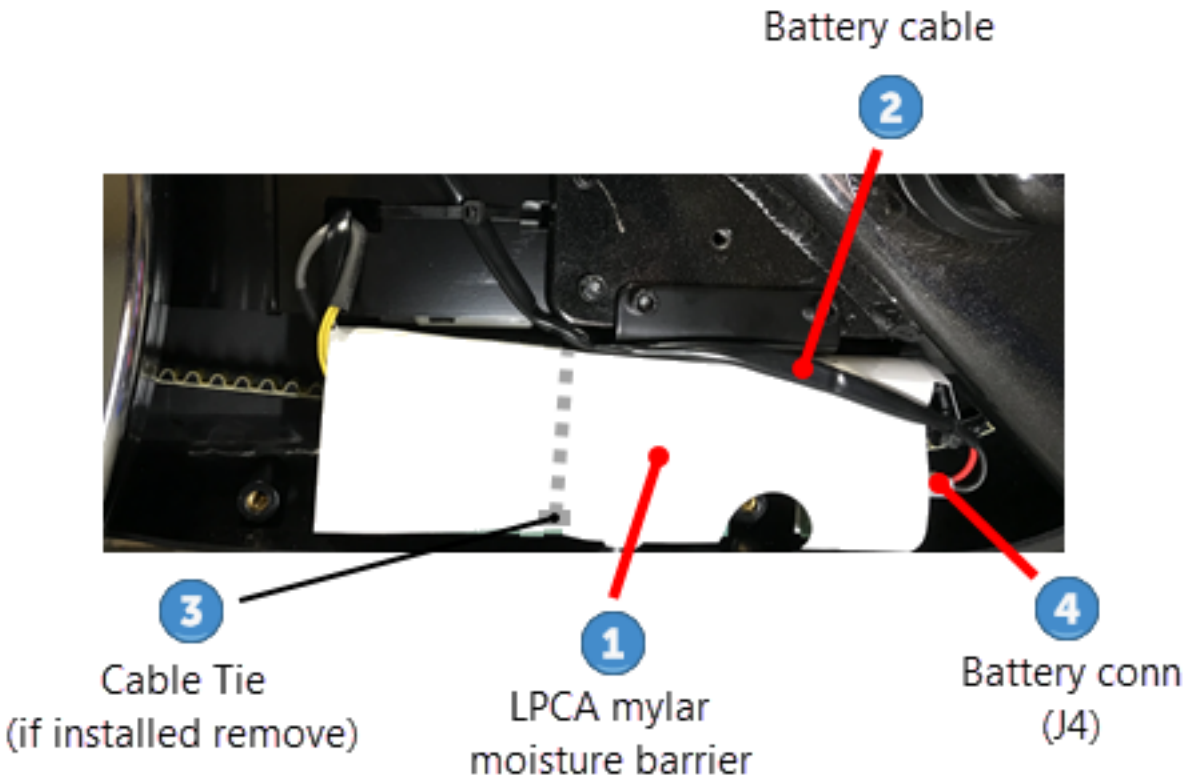
Procedure

Review entire procedure before starting.

CAUTION: Electronic components can easily be damaged by electrostatic discharge (ESD). Always use properly grounded anti-static wrist-strap and anti-static mat when handling or servicing printed circuit boards.

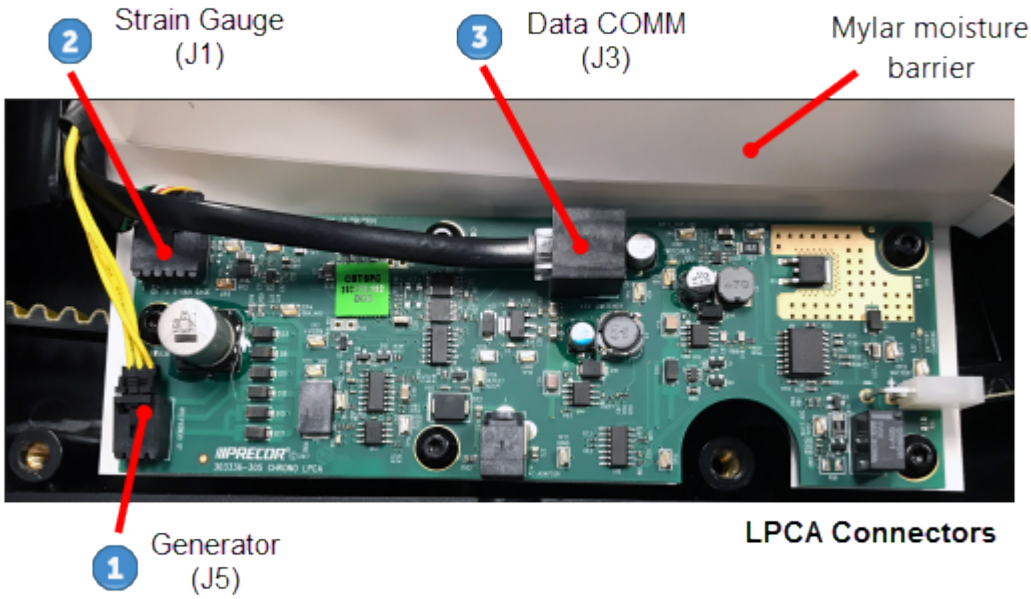
Removal Instructions

1. Remove the front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38.
2. Disconnect the battery cable Black wire from the Negative (-) battery terminal and then the Red wire from the Positive (+) battery terminal, see "Battery Replacement" on page 34 . Disconnect the battery Negative (-) terminal wire first:
3. Disconnect the battery cable 2 from the LPCA battery connector (J4) 4 , see the following diagram. (If there is a LPCA moisture barrier 1 cable tie 3 installed, cut, remove, and discard.)



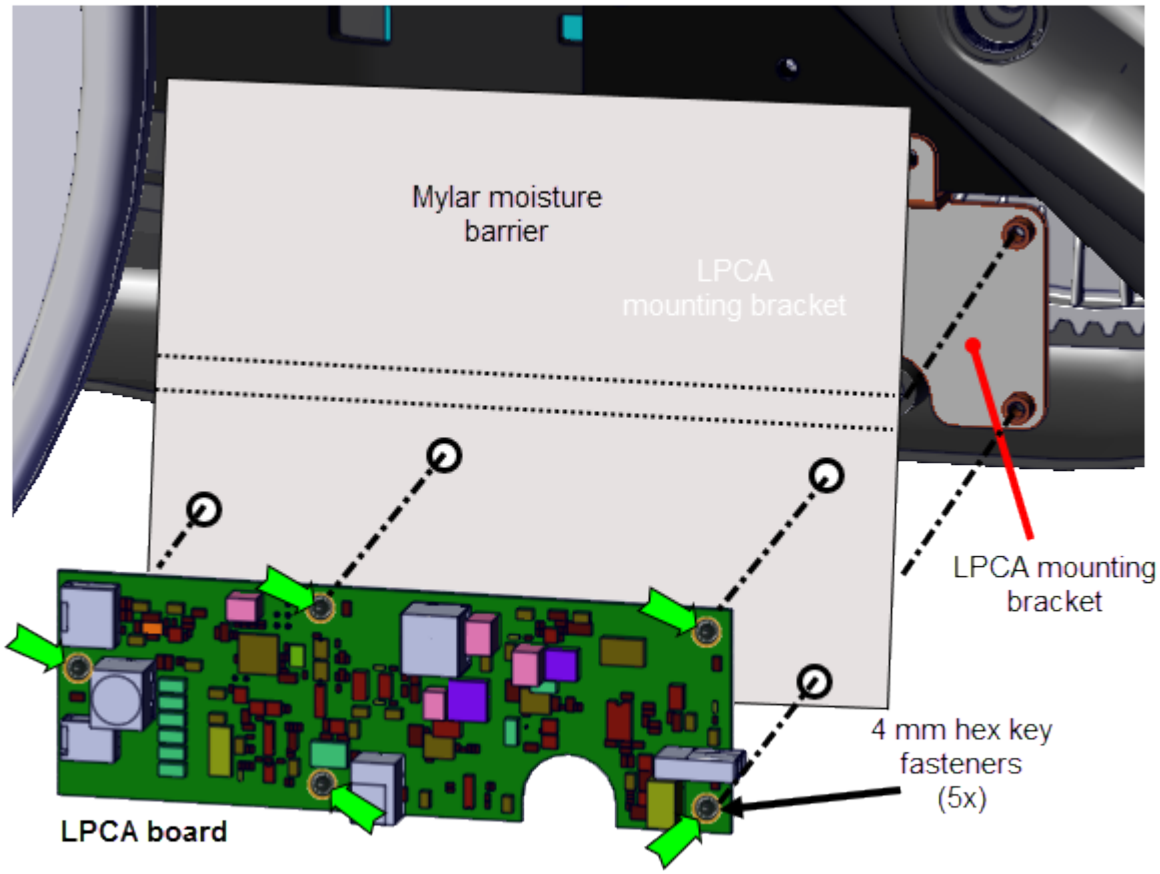
4. If installed, cut the cable tie that secures the Mylar moisture barrier to the front of the LPCA board.
5. Lift the Mylar moisture barrier and disconnect the Generator (J5) 1 cable connector, then the Data COMM (J3) 3 cable connector and last the Strain Gauge (J1) 2 cable connector.

CAUTION: Do not cut the Mylar moisture barrier to either remove or install the strain gauge cable connector. Cutting the barrier will allow sweat and other fluids to damage the LPCA board.



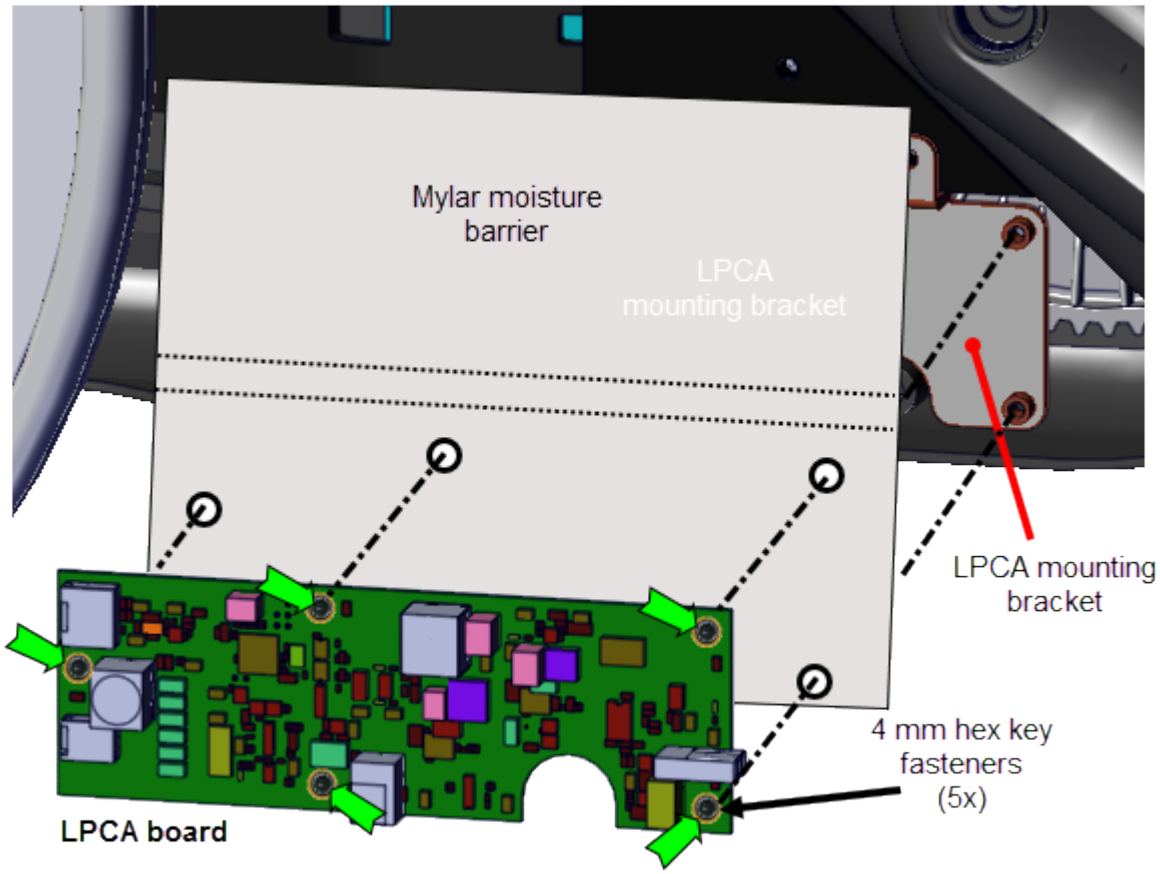
LPCA Connectors

6. Remove the five 4 mm hex key bolts (5x) and remove the LPCA board and Mylar moisture barrier. Retain the Mylar moisture barrier and fasteners for installation.



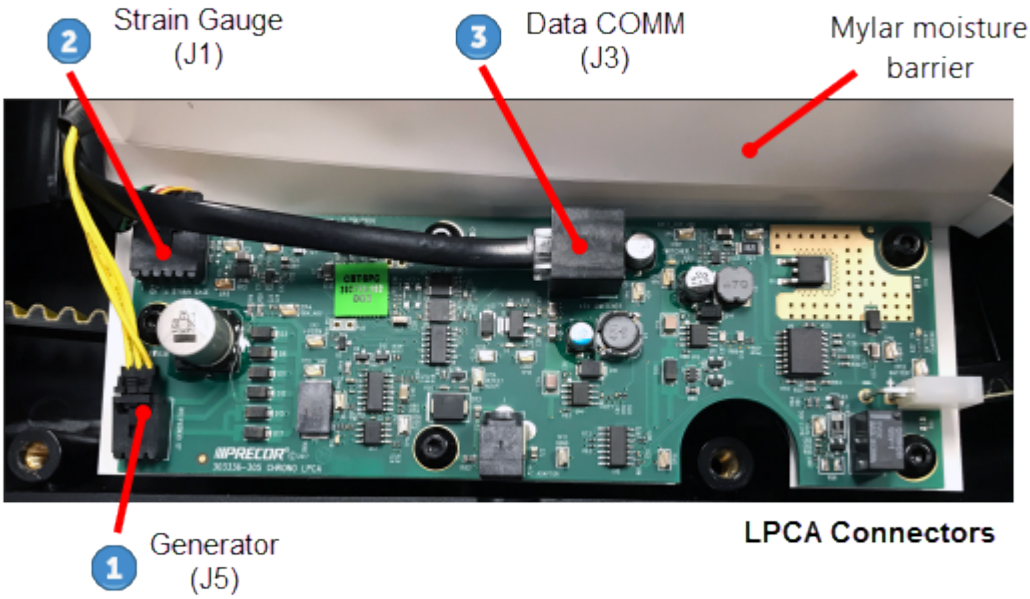
Installation Instructions

1. Position the Mylar moisture barrier and LPCA board onto the LPCA mounting bracket. Reinstall the five 4 mm hex key bolts and fully tighten.



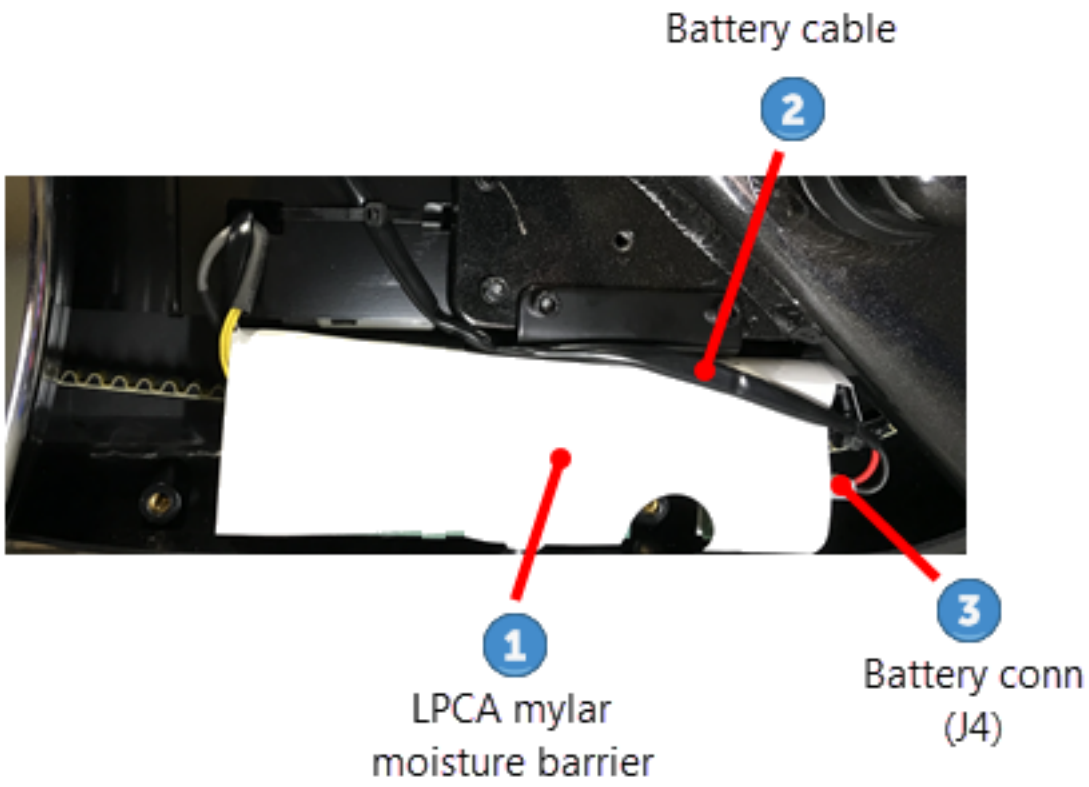
2. Reconnect the Strain Gauge (J1) 2 cable connector, then the Data COMM (J3) 3 cable connector and last the Generator (J5) 1 ,cable connector. Do not cut the Mylar moisture barrier to connect the Strain Gauge (J1) 2 cable connector.

CAUTION: Do not cut the Mylar moisture barrier to either remove or install the strain gauge cable connector. Cutting the barrier will allow sweat and other liquids to damage the LPCA board.



LPCA Connectors

2. Fold the Mylar moisture barrier 1 over the front of the LPCA board and then route the battery cable over 2 the moisture barrier and reconnect to the LPCA battery cable connector (J4) 3, see the following diagram.



Note: Do not install a zip tie to hold the moisture barrier cover over the LPCA board.

3. Reconnect the battery cable Red wire to the Positive (+) battery terminal and then the Black wire to the Negative (-) battery terminal, see "Battery Replacement" on page 34. Reconnect the Negative terminal cable last:
4. Reinstall the front and rear belt guard covers, see "Belt Guard Cover Replacement" on page 38.
5. Verify machine operation and return to service, see Operation Verification.

.See Also

"Replacement Procedures" on page 32

Pedal Replacement

About

This procedure provides instruction to remove and install the Pedals.

The pedals are dual-sided SPD® compatible pedal attached to oversized crank arms utilizing the patented Morse taper connections.

Available Movies

(Internet Only)

Pedal Replacement tutorial video.

Specifications

System Component	Specification
Pedal fastener	Torque[1] 33 ft-lb (45 N•m)

Specialized Tools

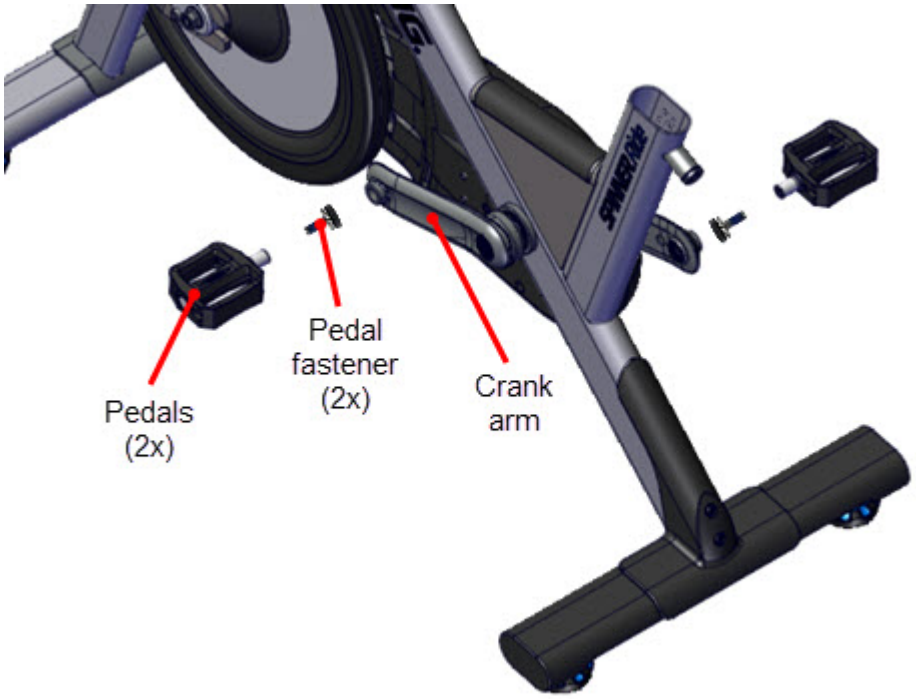
Tool		Part Number	Qty
Crank Extractor (used to remove pedal)		X-Tools Crank Extractor)(1) or similar	1

Procedure

Review entire procedure before starting.

CAUTION: Be careful not to scratch or dent bike with tools during the removal/installation process.

[1]Torque is a measure of the force that can cause an object to rotate about an axis. Bolt/nut example: 5 nM torque is equivalent to 5 newtons of force applied one meter from the center of the bolt, 6 ft-lb is equivalent to 6 lb of force applied 1 foot away from the center of the bolt.



Removal Instructions

1. Position the crank arm and right pedal to the 12 o'clock position.
2. Remove the pedal mounting bolt using an 8 mm hex key. Retain part(s) and/or fastener (s) for installation.

3. Use a crank puller (recommended PN X-Tools Crank Extractor or similar tool) to press the pedal out of the crank arm and remove. Attach the crank extractor to the crank arm

using a 15 mm wrench then use an 8 mm hex key to press the pedal out of the crank arm.

4. Repeat steps to remove the left pedal.

Installation instructions:

5. Insert the right pedal into the right crank arm. Seat the pedal by using a rubber mallet to lightly tap the center of the pedal into the crank arm.

6. Secure pedal with the pedal mounting bolt using an 8 mm hex key, torque to 33 ft-lb (45 N•m).

7. 

8. Repeat installation steps to install the left pedal.
9. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service

See Also

"Replacement Procedures" on page 32

Crank Arm Replacement

About

This procedure provides instruction to remove and install the Crank Arm.

Specifications

System Component	Specification
Crank arm fastener	33 ft-lb (45 N•m)

Specialized Tools

Tool		Part Number	Qty
Crank Extractor (used to remove pedal)		X-Tools Crank Extractor)[1] or similar	1
Medium strength threadlocker		Loctite 243	1
adjustable 36 mm open end wrench		generic part	

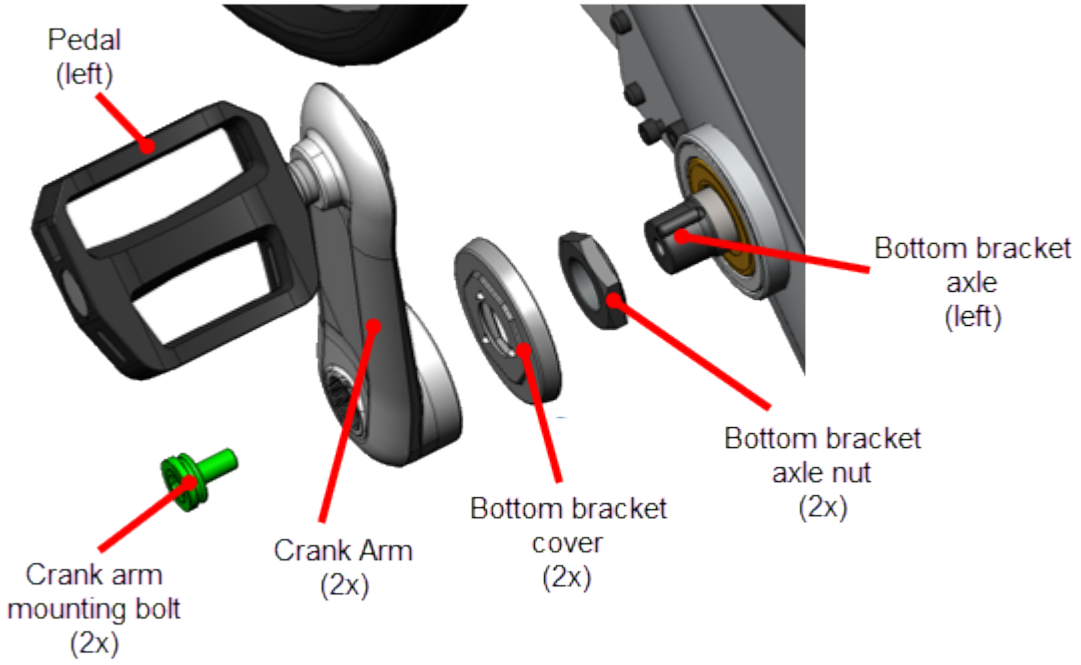
Procedure

Review entire procedure before starting.

CAUTION: Be careful not to scratch or dent bike with tools during the removal/installation process.

Removal Instructions

1. Remove the left and right pedals, see "Pedal Replacement" on page 112.
2. Remove the left crank arm mounting bolt using an 8 mm hex key.



1. Use a crank puller (recommended Park Tool CCP-222 to pull the crank arm from the bottom bracket bearing axle and remove.
2. Remove the bottom bracket cover.

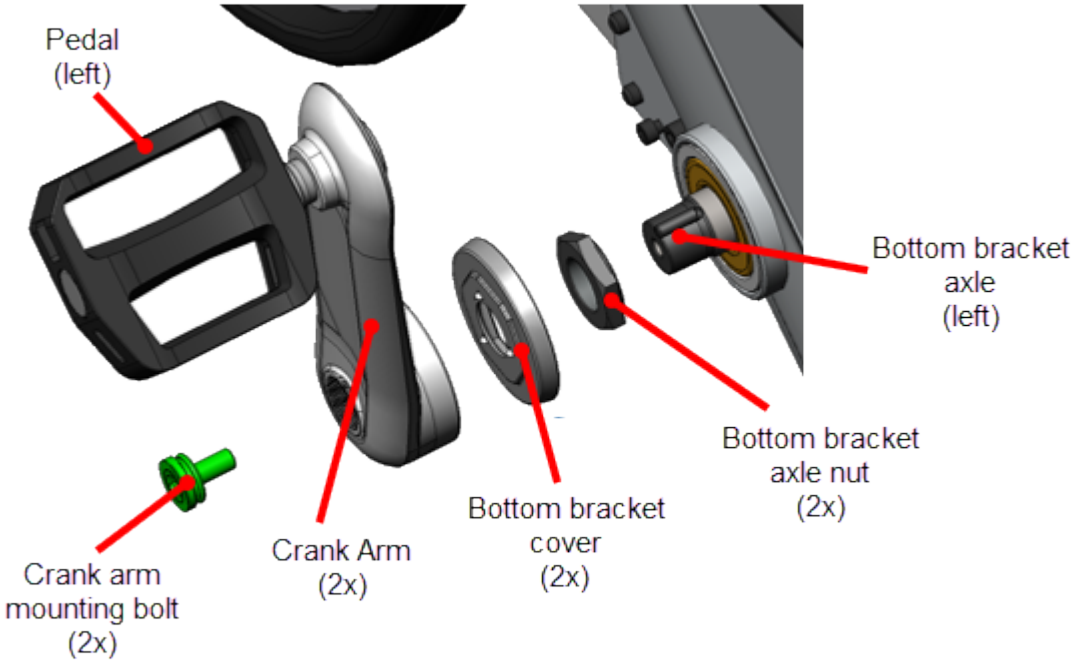
Note: Early production bikes may not include the bottom bracket cover, see service bulletin SB.SBK[1].20160825 for information.

3. Remove the bottom bracket axle 36 mm nut. Clean the axle nut and the bottom bracket axle threads. Retain part(s) and/or fastener(s) for installation.
4. Repeat steps to remove the right crank arm.

Installation instructions:

1. Apply a light coat of multipurpose oil to the 36 mm axle nut threads and install onto the bottom bracket axle. Fully tighten the axle nut.

[1]Spinner Indoor Cycle



1. Install bottom bracket cover onto the bottom bracket axle over the axle nut.
2. Install the left crank arm onto the left side bottom bracket axle. Seat the crank arm by using a rubber mallet to lightly tap the crank arm onto the bottom bracket axle.
3. Apply Loctite 243 to the 8 mm hex key crank arm mounting bolt, torque to 33 ft-lb (45 N•m).
4. Repeat installation steps to install the right crank arm.
5. Install the left and right pedals, see "Pedal Replacement" on page 112.
6. Verify the bike operation and return to service, see "Operation Verification" on page 9.

See Also

"Pedal Replacement" on page 112

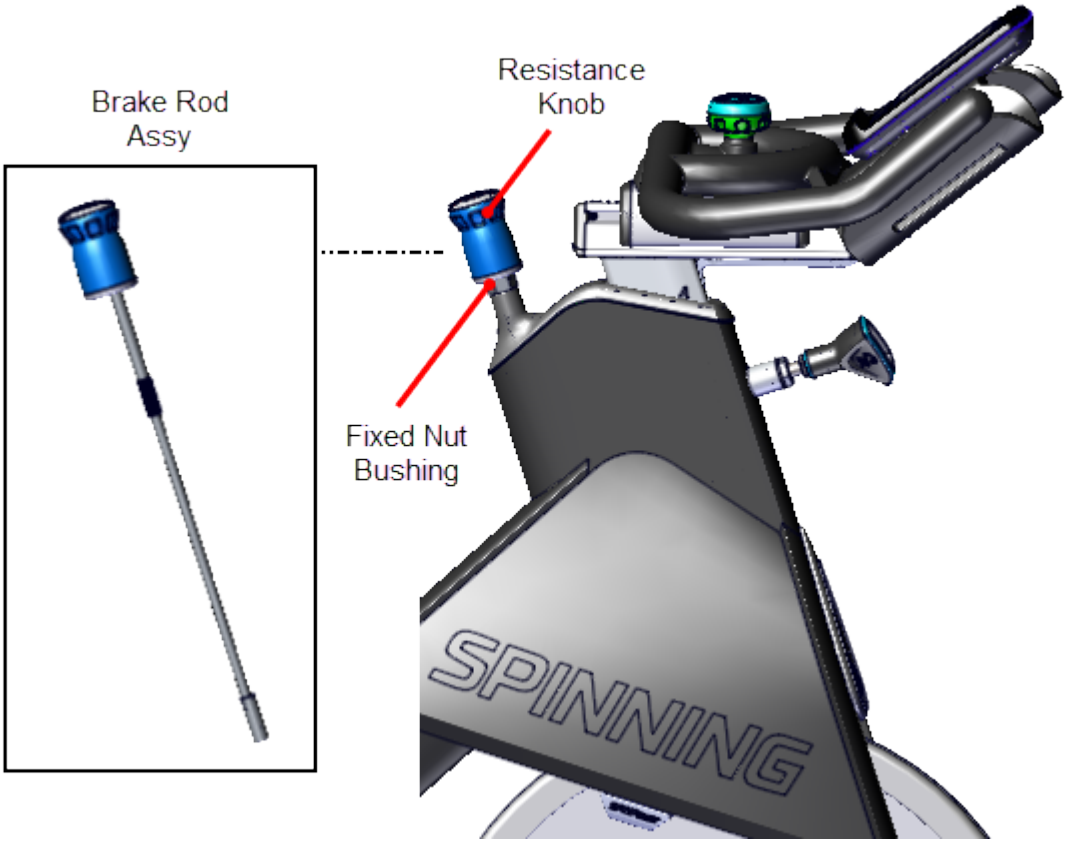
"Operation Verification" on page 9

Resistance Knob Replacement

About

This procedure provides instruction to remove and install the Resistance Knob assembly.

The resistance knob is part of the Brake Rod Assy. Replace the Brake Rod Assy to replace the Resistance Knob

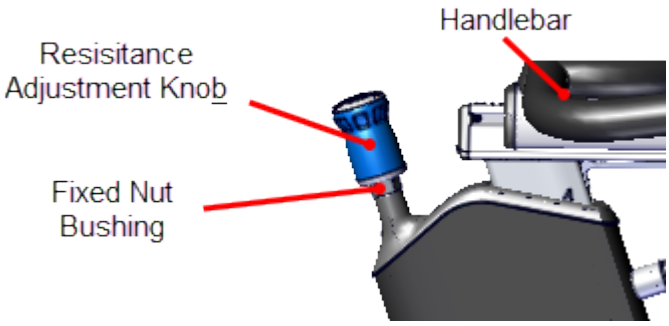


Procedure

Review entire procedure before starting.

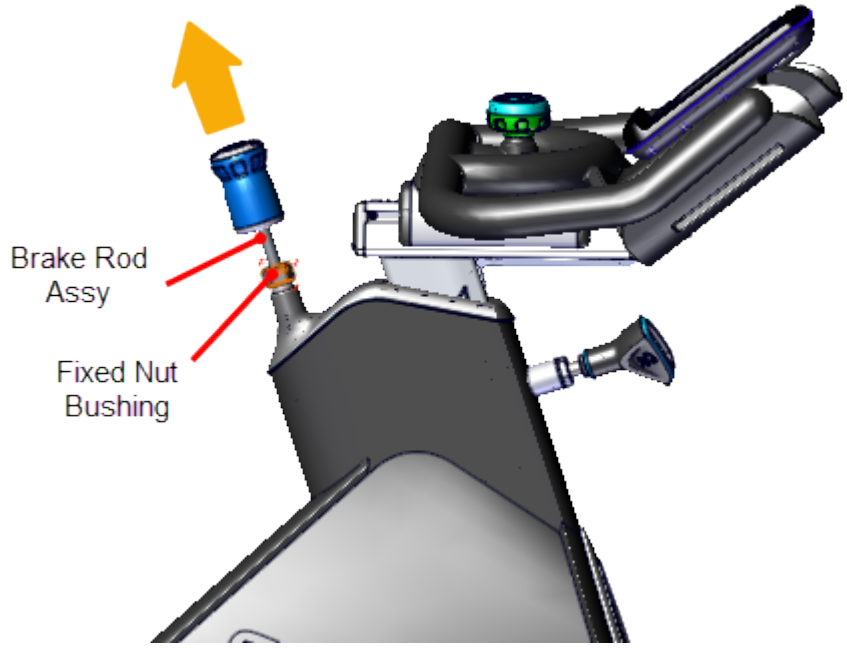
Removal Instructions

1. Expose the Fixed Nut Bushing by turning the Resistance Knob counterclockwise (-) until the stop is reached.



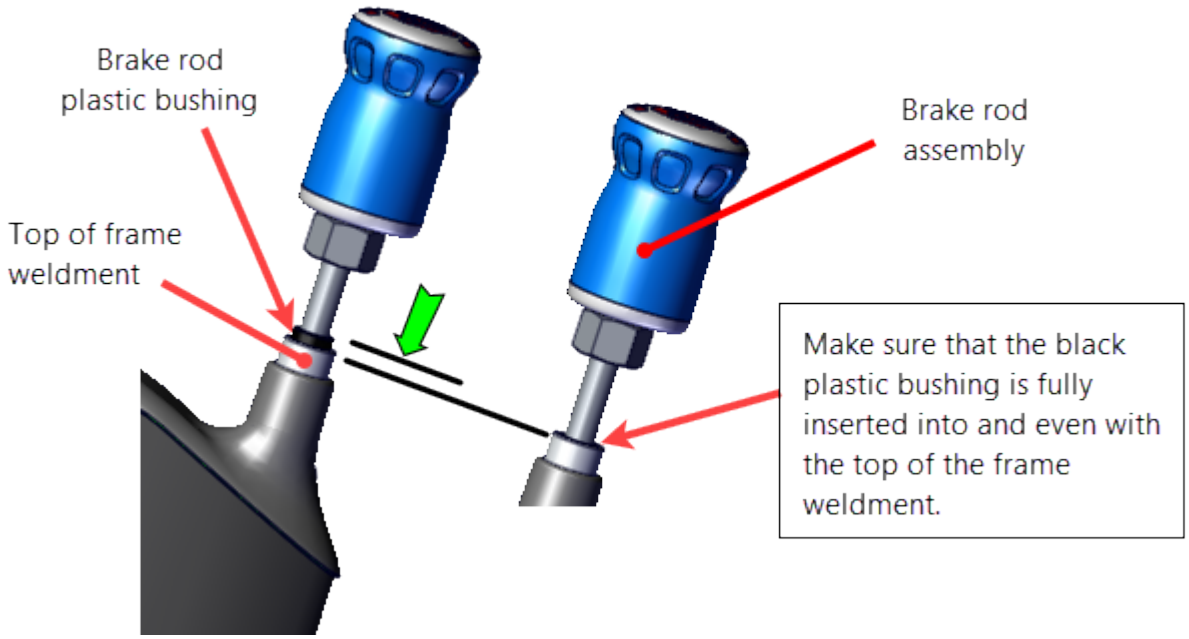
2. Use a 21 mm open end wrench to loosen the Fixed Nut Bushing while lifting the Brake Rod Assy and Resistance Knob from the bike frame.

Note: The bushing at the end of the brake rod may catch on the caliper preventing the rod from being lifted out of the frame weldment. If this occurs, the caliper will need to be removed to extract the brake rod assembly, "Brake Caliper Assembly Replacement" on page 48.

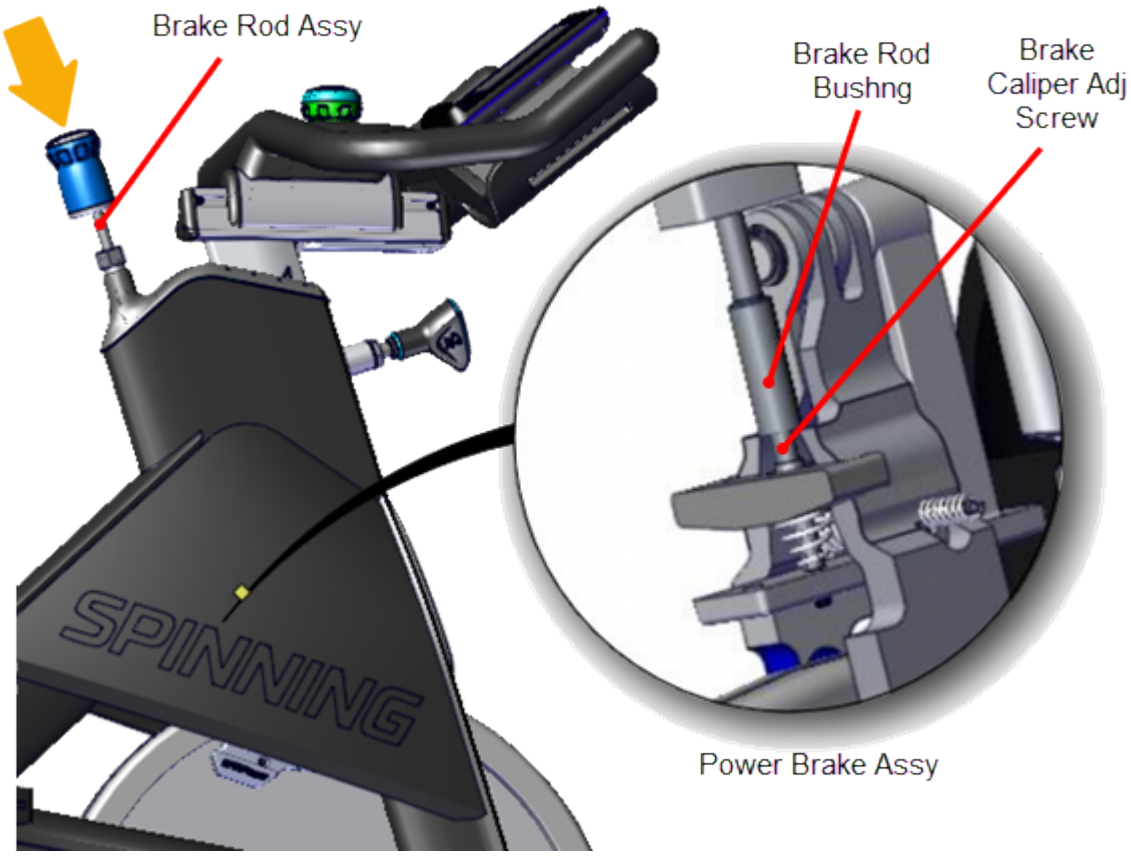


Installation Instructions

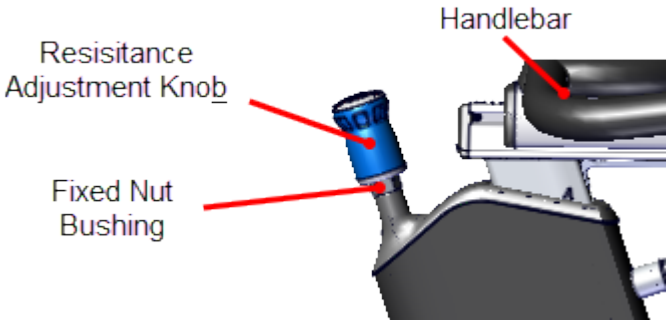
3. If the brake caliper was removed to extract the brake rod assembly, reinstall the caliper, see "Brake Caliper Assembly Replacement" on page 48.
4. Before installing the brake rod assembly, make sure that the brake rod plastic bushing is fully inserted into the frame weldment.



5. Carefully reinstall the Brake Rod Assy in the bike frame. Make sure the bushing at the end of the Brake Rod fits over the Power Brake Assy - Caliper Adjustment Screw.



6. Tighten the Brake Rod Assy - Fixed Nut Bushing.



7. Set the resistance to minimum.
8. Start pedaling the bike greater than 55 rpm while increasing the resistance level to maximum and returning to minimum resistance.
    - Verify smooth resistance operation from minimum to maximum levels.
    - Verify that at maximum resistance, the pedal resistance was very strong.
    - Verify that there were no unusual noises from the brake pads during this operation.

9. While riding the bike, stop pedaling and firmly press down the resistance knob. Verify that the flywheel immediately slows down and stops rotating.
10. Verify the bike operation per "Operation Verification Checklist" on page 9 and return to service.

See Also

"Replacement Procedures" on page 32

Seat Assembly Replacement

About

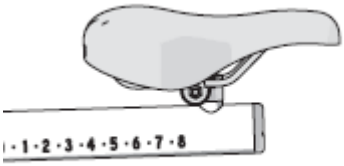
This procedure provides instruction to remove and install the Seat Assembly which includes: the Seat, Seat Slider Assembly, and Seat Post.

Procedure

Review entire procedure before starting.

Seat replacement instructions

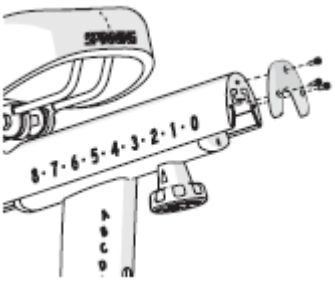
1. Remove seat by loosening he seat mounting bolt and pulling seat off the seat post.



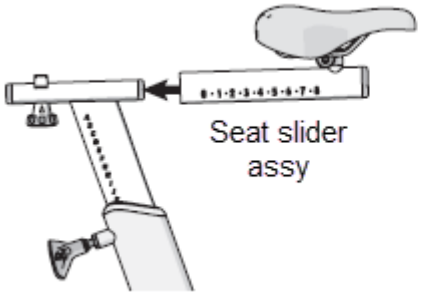
2. Reinstall by placing seat onto the seat post.
3. Adjust the seat so that it is inline and level with the frame. Tighten the seat mounting bolt. Sit on bike and verify the seat position, make adjustments as necessary.
4. Return bike to service.

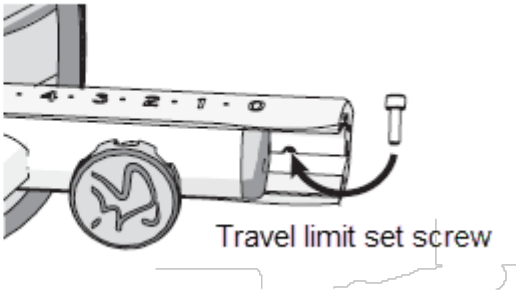
Seat slider assembly replacement instructions

1. Loosen the seat adjustment knob.
2. Remove the seat slider - rear end cap by removing the three mounting screws using a 2.5 mm hex key. Retain part(s) and/or fastener(s) for installation.



3. Remove the slider travel limit set screw located on the underside of the seat slider using a 2.5 mm hex key. Retain part(s) and/or fastener(s) for installation.
4. Remove seat slider assembly by moving it towards the front of the bike.

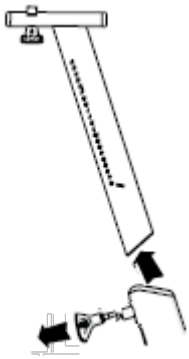




5. Reinstall the replacement seat slider in reverse order.
6. Verify the seat slider forward/reverse travel is smooth and is blocked from sliding off the seat post.
7. Verify that the seat fwd/rev adjustment knob works properly and return to service.

Seat post replacement instructions

1. Pull the seat height adjustment pop-pin and remove the seat post from the frame.



1. Reinstall the seat post by pulling the height adjustment pop-pin and inserting the post into the bike frame. Release the pop-pin so that it engages into the seat post hole.
2. Verify that the seat height adjustment works properly and return to service.

See Also

"Replacement Procedures" on page 32

Stabilizer Replacement

About

There is a front and rear stabilizer, select the procedure for your application.

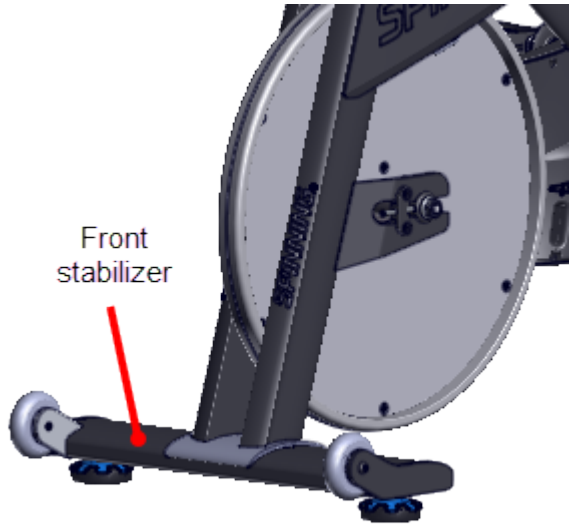
"Front Stabilizer Replacement" on the next page

"Rear Stabilizer Replacement" on page 131

Front Stabilizer Replacement

About

This procedure provides instruction to remove and install the Front Stabilizer.



Specifications

System Component	Specification
Stabilizer fastener Torque[1]	15.6 ft-lbs (21 N•m)

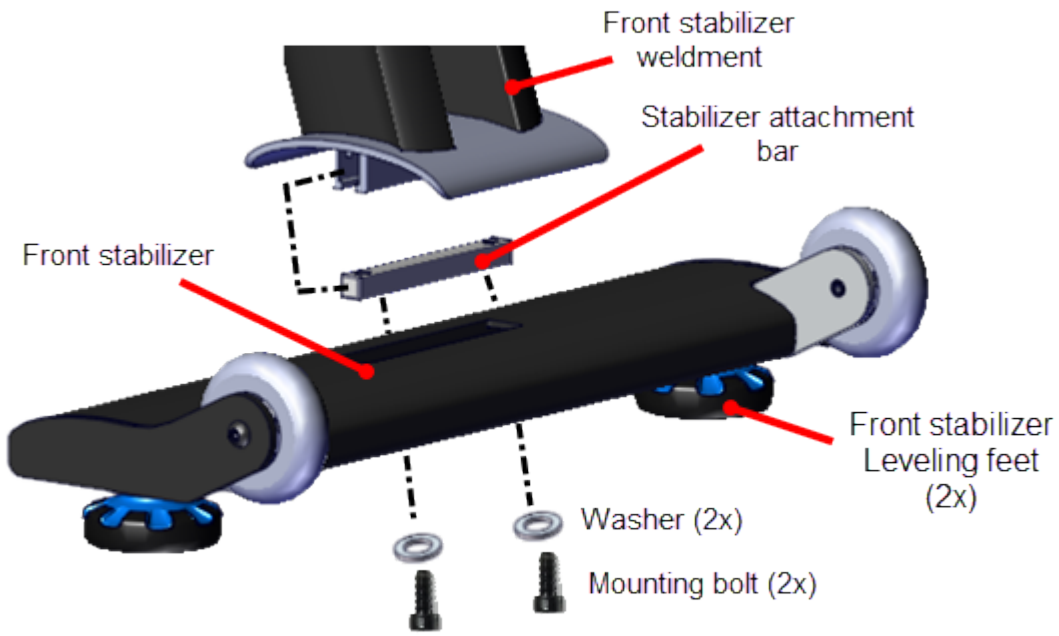
Procedure

Review entire procedure before starting.

Removal Instructions

1. Place a soft mat under the bike frame and stand the bike frame on its back resting on the rear stabilizer and seat rail.
2. Remove the two stabilizer leveling feet (2x). Retain stabilizer leveling feet for installation.

[1]Torque is a measure of the force that can cause an object to rotate about an axis. Bolt/nut example: 5 nM torque is equivalent to 5 newtons of force applied one meter from the center of the bolt, 6 ft-lb is equivalent to 6 lb of force applied 1 foot away from the center of the bolt.



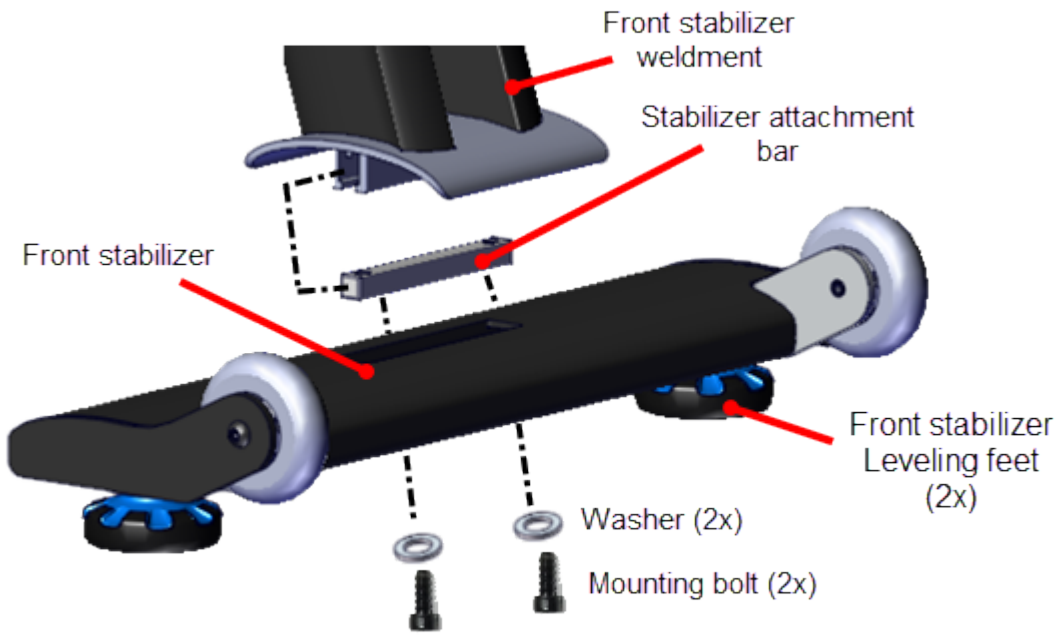
Front Stabilizer

3. Remove the front stabilizer by removing the two 6 mm hex key mounting bolts (2x) and washers (2x). Retain part(s) and/or fastener(s) for installation.

NOTE: The stabilizer attachment bar can slide out of the weldment mounting bracket. Make sure the attachment bar remains in position and not lost between removal and installation.

Installation Instructions

1. Center the stabilizer attachment bar into the front stabilizer weldment bracket.



Front Stabilizer

2. Position the front stabilizer onto the frame and secure using the two 6 mm hex key stabilizer mounting bolts (2x) and washers (2x) , torque to 15.6 ft-lbs (21 N•m).

CAUTION: Do not over tighten fasteners. The bolt heads can snap off if over tightened.

3. Reinstall the two stabilizer leveling feet.
4. Return bike to the upright position.
5. Make sure the bike is level and setting firmly on the floor, see "Bike Leveling Adjustment" on page 30.
6. Verify bike operation per the "Operation Verification" on page 9 check list and return to service.

See Also

"Rear Stabilizer Replacement" on the facing page

"Bike Leveling Adjustment" on page 30

Rear Stabilizer Replacement

About

This procedure provides instruction to remove and install the Rear Stabilizer.

Specifications

System Component	Specification
Stabilizer fastener Torque[1]	15.6 ft-lbs (21 N•m)

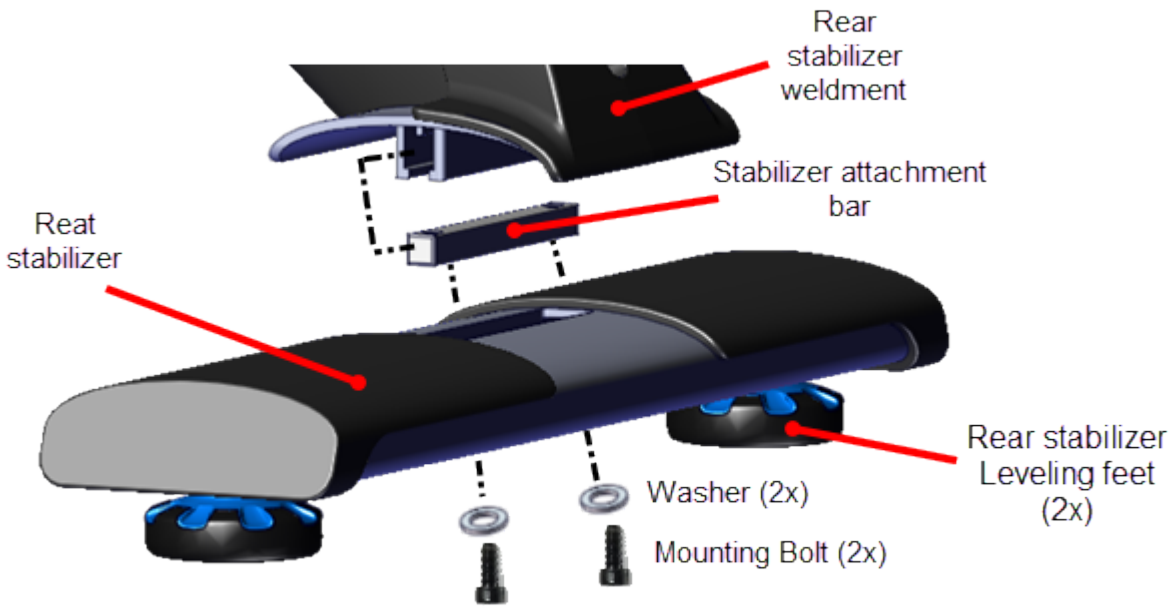
Procedure

Review entire procedure before starting.

Removal Instructions

1. Place a soft mat under the bike frame and stand the bike frame on its rear resting on the front stabilizer and handlebar.
2. Remove the two rear stabilizer leveling feet (2x). Retain stabilizer leveling feet for installation.

[1]Torque is a measure of the force that can cause an object to rotate about an axis. Bolt/nut example: 5 nM torque is equivalent to 5 newtons of force applied one meter from the center of the bolt, 6 ft-lb is equivalent to 6 lb of force applied 1 foot away from the center of the bolt.



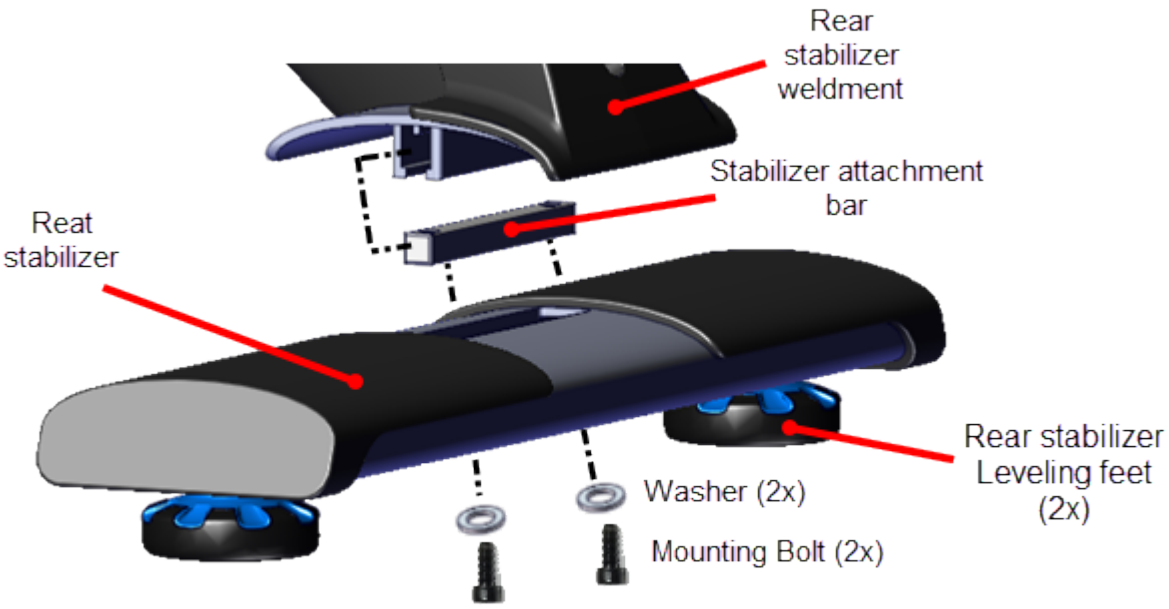
Rear Stabilizer

3. Remove the rear stabilizer by removing the two 6 mm hex key mounting bolts (2x) and washers (2x). Retain part(s) and/or fastener(s) for installation.

NOTE: The stabilizer attachment bar can slide out of the weldment mounting bracket. Make sure the attachment bar remains in position and not lost between removal and installation.

Installation Instructions

1. Center the stabilizer attachment bar into the rear stabilizer weldment bracket.



Rear Stabilizer

2. Position the rear stabilizer onto the frame weldment and secure using the two 6 mm hex key stabilizer mounting bolts (2x) and washers (2x) , torque to 15.6 ft-lbs (21 N•m).

CAUTION: Do not over tighten fasteners. The bolt heads can snap off if over tightened.

3. Install the two rear stabilizer leveling feet.
4. Return bike to the upright position.
5. Make sure the bike is level and setting firmly on the floor, see "Bike Leveling Adjustment" on page 30.
6. Verify bike operation per the "Operation Verification Checklist" on page 9 and return to service.

See Also

"Front Stabilizer Replacement" on page 128
"Bike Leveling Adjustment" on page 30

Troubleshooting

About

This section contains troubleshooting information to help you identify, isolate, and resolve component and system issues.

Review the *Introduction To Troubleshooting* section below to learn about the troubleshooting process, troubleshooting best practices, and other pertinent information that will help you efficiently troubleshoot issues and return the equipment to service.

Information that will help you troubleshoot:

- Review the "Introduction To Troubleshooting" below section below.
- Review the Service and Diagnostic Menus topic.
- Review the " Active Status Light (ASL)" on page 143 topic.
- Review the About the Error Log topic.
- Refer to the Error Code Troubleshooting Guide for error code description and troubleshooting repair information.
- Review the System Troubleshooting Procedures topic.

Introduction To Troubleshooting

Troubleshooting issues is an investigative process best implemented utilizing a systematic approach that efficiently targets the issue cause allowing correct equipment repairs and return to service. The following information will help you to systematically troubleshoot and resolve issues.

Basic Steps

1) Validate the customer reported issue:

The failure that is reported may differ from your observations as a trained technician. Many reported failure are not true failures and can be fixed without a customer visit.

- (powered units only) Always ask the customer if the unit power is connected and switched ON.
- Further interrogate the customer to determine if this is the real issue requiring an on-site visit or possibly a different issue that can be simply resolved over the phone.

2) Verify that the console is operating correctly

Refer to the console operating guide to learn how to run the console display test:

The sell-powered Spinner® Chrono[1]™ bike models use the Spinner® Chrono™ consoles and the non-powered models use the Spinning® Studio Consoles.

"Spinner® Chrono™ Console" on page 161

Spinner® Chrono™ console

"Spinning® Studio Console" on page 170

Spinning® Studio Console

3) Review the Error Log for any detected codes

Always review the Error Log when troubleshooting an issue. The error log will contain any triggered error code event and related information. Then use the Error Code Troubleshooting Guide to help resolve the reported error code. Also, when calling Precor customer service for assistance, refer to the Error Log and report any logged error codes to the customer support representative.

Refer to the Error Code Troubleshooting Guide for error code descriptions and repair information.

IMPORTANT: Error code descriptions and troubleshooting information can be found in the *Error Code Troubleshooting Guide*, see Error Code Guide Troubleshooting Guide.

Note: Not all failures trigger an error event code. Many issues are purely mechanical in nature and therefore cannot trigger an error event code.

4) Verify (reproduce) the issue.

Operate the unit in normal user mode and attempt to reproduce the reported failure. Determine if the error is a repeatable or intermittent type failure. Make note of any additional observations (noises, vibrations, etc.) that occur at the time of the failure which may then be used to help resolve the issue.

Note: It is important to keep in mind that some issues are weight (load) related. You may need to test the unit at minimum and maximum load limits to reproduce the fail-

[1]Spinner® Chrono™ Power bike.

ure.

5) Perform hardware validation service tests

On Chrono consoles, access the service mode and run any related tests that might help isolate the cause of the issue, see "Spinner® Chrono™ Console" on page 161. These tests will also help to identify good and failed components. Resolve any resulting failures.

6) Verify that there are no new error codes

After correcting the issue, use the equipment from minimum to maximum resistance and speed ranges. Then stop pedaling and verify that the Error Log does not contain any new error codes. . This will verify that the original error codes issues are fixed and that there are no new error code issues.

Note: If there is no logged error codes and the issue persists, you will need to use observable and audible indicators to identify the source of the failure. Also make sure that there are no related service bulletins that may resolve the issue. Go to Precor Connect website and browse the list of current service bulletins.

7) Verify service bulletins

Go to the Precor Connect website and browse the list of machine service bulletins and tech-tips. Incorporate any missing service bulletin repairs and in particular any bulletins that may fix the current failure.

Service and Diagnostic Menus

(Spinner® Chrono[1]™ Power models only)

About

In addition to the primary workout display information, the Spinner® Chrono™ console has a service/setup mode providing access to the club setup parameter menus, the bike information menus, the current operating information menus, and to the service diagnostic test menus:

- **Club Parameters**: Use Club Parameter settings to choose the type of information you want exercisers to see on the console while working out.
- **Informational Settings**: The Information Settings contain the information required when you contact Precor Customer Support including serial numbers, software program versions, odometer, and model numbers.
- **Operational Information**: The operating Torque[2], WATTS, and RPM values.
- **Service Tests**: Perform tests to help you troubleshoot systems including torque, WATTS, RPM, battery, generator and console display.
- **Error Log**: View the detected error event codes, see "Error Log" on page 147.

USB[3] *Port*

The console USB port is used for program updates, system settings cloning between consoles, and to download system information and error log data.

Service/Setup Mode Access

Service/Setup Mode Access

[1]Spinner® Chrono™ Power bike.

[2]Torque is a measure of the force that can cause an object to rotate about an axis. Bolt/nut example: 5 nM torque is equivalent to 5 newtons of force applied one meter from the center of the bolt, 6 ft-lb is equivalent to 6 lb of force applied 1 foot away from the center of the bolt.

[3]Short for Universal Serial Bus, is an industry standard developed in the mid-1990s that defines the cables, connectors and communications protocols used in a bus for connection, communication, and power supply between computers and electronic devices.

1) Alway begin at the ***Welcome*** screen..

2) Press the following buttons.

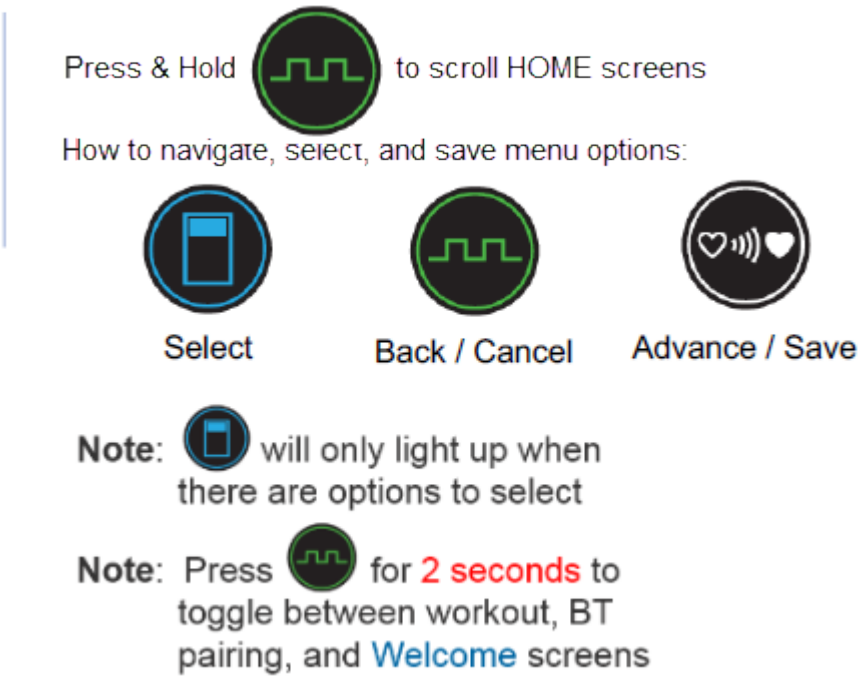
3) Press & Hold > Blue button 

4) Press White > Green > Green > White

Menu Navigation

Menu Navigation

The menus are accessed sequentially by scrolling through the list of menus in a forward or reversed direction using the following console buttons. You cannot directly access a menu item.



Service and Settings Menus

Service and Settings Menus

Note: Refer to the SPINNER® CHRONO™ CONSOLE "Operators Guide", at Operator's Guide, for the latest console menu information.

Club Parameter Settings

Use the Club Settings to choose the type of settings and information available to the exercisers.

Setting	Description	Setting options (de
UNITS	Speed and distance measurements	**MPH**, KPH
BACKLIGHT	Three is the brightest setting	**3**, 1, 2
DISP MODE	Energy measurements	**SPINPOWER**, CAL,
ASL SETUP	Active Status Light (ASL): Turns on and tests light so its color alerts owner of bike maintenance issues	**ON**, OFF, YELLOW
BT PAIRING	Turn ON so that exerciser's can pair their phone to save their workout information	**SHORT**, ON, OFF
MAJOR INSP	• After routine inspection and maintenance, **clear** this setting to reset the ASL to steady blue, clear the error log, and reset the maintenance value back to the maintenance default. • The maintenance default is 1000 miles • Change this default using a Setup.ini file	**KEEP**, CLEAR
CLEAR ERROR	Select **CLEAR** to delete errors from the error log	**KEEP**, CLEAR
DEVICE ID	The default number is based on the product lower serial number	Default ID # (Can b using the blue butto
LANGUAGE	• Service mode is English only • Select the language for all exercisers	**ENGLISH**, SPANISH GERMAN
SETUP	For use with USB stick during setup	**NO**, YES
RESET	Returns all settings to factory defaults, except system information (number of workouts, hours, and distance)	**NO**, YES
PROGRAM	For use with USB stick during software upgrades	**NO**, YES

Information Settings Parameters

The Information Settings contain the information required when you contact Precor Customer Support including serial numbers, software program versions, odometer and error log summary, and model numbers.

Note: It is possible to record system information and the error log on a properly formatted USB drive.

Setting	Description
CONS SN	Console serial number that is printed on a label on the back of the console
LPCA SN	Serial number for the printed circuit board in the base, which is also the base equipme
TOP SW	Versions of CONS and GEM software are in console
CONS SW	One of the two software programs in console
GEM SW	One of the two software programs in console
LPCA SW	Software part number for the printed circuit board in the base
ODOMETER	Total distance (in miles) on bike
HOURS	Total hours of use on bike
WORKOUTS	Total number of workouts on bike
ERROR LOG	• If there are no errors, then there will be nothing below the title. • If there are errors, the five most recent errors appear. Press the blue key to naviga
MODEL TYPE	Bike model number

Operational Information

Setting	Description
Torque	Reported strain gauge force (in-lb)
WATTS	Reported power = Total torque x RPM (WATTS)
RPM	Revolutions per minute (pedal rate)

Service Tests

Perform tests to help you troubleshoot systems including torque, WATTS, RPM, battery and generator voltage and amps, and display elements.

Press the white button to move from one test to the next.

Setting	Description
DISP TEST	Tests the display to make sure all elements are working. Select **YES** to test the displ
BAT VOLT	Battery voltage: While you pedal or if you have an external charger installed, the vol because the battery is charging. When you stop pedaling, you will see the actual (tru
BAT AMP	Battery amp: Battery current being discharged.
GEN VOLT	Generator voltage: Speed of pedaling affects the voltage number.
GEN AMP	Generator amp: Current being supplied by generator.
USB LOGS	Data from this setting is stored in Log directory.

Error Log

Error Log

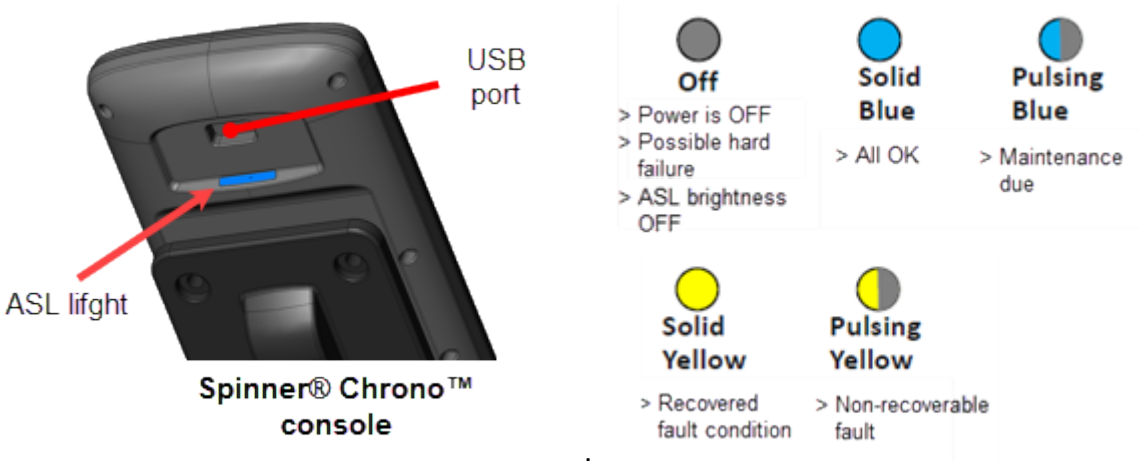
Go to "Error Log" on page 147.

Active Status Light (ASL)

(Spinner® Chrono[1]™ Power models only)

About

The Active Status Light (ASL[2]) is a service and maintenance status light located on the back of the Spinner® Chrono™ console. The ASL provides a visual indication of the machine operational status. The current implementation supports four states: 1) solid blue - indicates normal operation, 2) pulsing blue - indicates preventative maintenance is required; 3) solid yellow - indicates an error has occurred but the machine is useable; and 4) pulsing yellow - indicates a loss of major function was detected.



ASL Overview

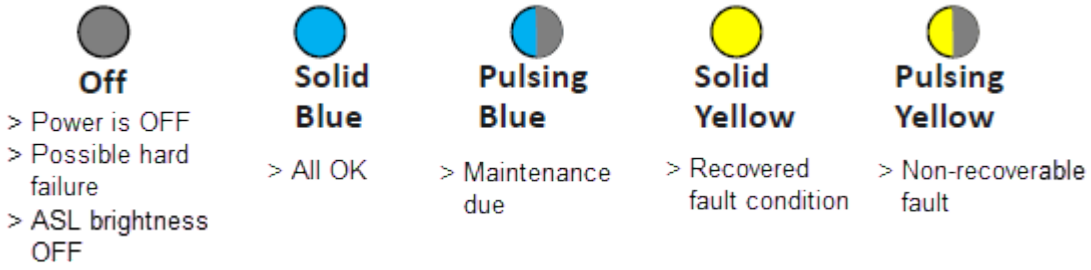
- An externally visible indicator of the current machine operational status. There are four supported states: 1) solid blue - indicates normal operation, 2) pulsing blue - indicates preventative maintenance is required; 3) solid yellow - indicates an error has occurred but the machine is useable; and 4) pulsing yellow - indicates a loss of major function was detected.
- Because only one status color and state can be shown at a time, the condition states are prioritized as follows from lowest to highest: Blue Solid (lowest), Blue Pulsing, Yellow Solid, Yellow Pulsing (highest). Higher priority states are always shown before a lower priority state, until cleared.
- Only direct error code and maintenance counter data is used to determine the current machine ASL state. No special algorithms (e.g., user behavior) are utilized to determine the status.

[1]Spinner® Chrono™ Power bike.
[2]Active Status Light: Service and maintenance status light.

- The console lower control board (UPCA[1]) determines the ASL state using inputs from the error log and maintenance counter. During active operation (workout in progress) or during the pause state, the console transmits the ASL state to the lower control board (LPCA[2]).
- Error code operation: A logged system error code will cause the ASL to begin pulsing yellow. If the error self-corrects, the ASL will change from pulsing to solid yellow. Depending on the error code type, after the end of a workout, the solid yellow light will either revert back to blue (or pulsing blue), or require the operator to do a manual reset from the service menu.

ASL States

The ASL utilizes a combination of blue and yellow lights to indicate the current operational machine status.



ASL State	DESCRIPTION
OFF	The unit is powered OFF when the pedals are stopped or there is an ASL hard failure. The ASL brightness can be set to OFF.
Blue Solid	Normal operation Indicates that the ASL has not detected any system error codes.
Blue Pulsing	Preventative maintenance reminder The maintenance counter starts at 1000 miles and counts down the active use hours to 0. When the counter reaches zero hours, the ASL will begin pulsing blue indicating preventative maintenance is due.
Yellow Solid	Indicates an error has occurred, was self-corrected and the machine can be used. The fault can be manually cleared or will auto-reset if no new detected errors after 50 miles of use.

[1]Upper PCA board

[2]Lower printed circuit assembly; generally this refers to the lower board. On treadmills, this is the motor controller unit (MCU), and on self-powered units, it is the main board in the lower section.

ASL State	DESCRIPTION
Yellow Pulsing	There is a current non-recoverable fault condition, there is a loss of a major function and the machine is out-of-service. Machine service is required.

ASL Setup and Test

ASL Setup and test

Menu Path: service menu > select **ASL SETUP**
Range: ON, OFF, YELLOW ON, BLUE ON

ASL SETUP is used to switch ON or OFF the ASL indicator light for all state conditions and to test the ASL yellow and blue LEDs.

ASL SETUP	DESCRIPTION
ON	Normal ASL operation, Indicates all maintenance state conditions: solid blue, pulsing blue, solid yellow, and pulsing yellow.
OFF	Switches OFF the ASL light, no maintenance ASL state conditions are indicated.
Blue ON	Tests the ASL blue LED. When selected the blue ASL light is ON.
Yellow ON	Tests the ASL yellow LED. When selected the yellow ASL light is ON.

Resetting the ASL state and Maintenance Counter

Resetting the ASL state and maintenance counter

Menu Path: service menu > select **MAJOR INSP**
Range: KEEP, CLEAR

Use **MAJOR INSP** setting to reset the ASL state, error log, and maintenance counter to factory defaults after a major inspection determined that the bike is in return to service condition.

MAJOR INSP	DESCRIPTION
KEEP	Keep the current ASL state condition and the current maintenance miles.
CLEAR	Clears and resets the current ASL state condition, clears the error log, and the current maintenance miles to factory default. After routine inspection, preventative maintenance or repairs, select **CLEAR** to reset the ASL to normal state (steady blue), clear the error log, and reset the maintenance counter (1000*) to factory defaults.

MAJOR INSP	DESCRIPTION
	Note: * the maintenance miles default can be changed in the ".ini" file.

Clearing a Pulsing Yellow and/or Steady Yellow ASL state

Clearing a Pulsing Yellow and/or Steady Yellow ASL state

Clearing a pulsing yellow state

An ASL pulsing yellow state is triggered when an error code event occurs and is logged. To clear a pulsing yellow state, the error condition causing the ASL pulsing yellow must first be resolved either manually or the machine may resolve and self-clear the issue. A manually or machine self-cleared error code will change the ASL state from pulsing yellow to the solid yellow state.

Clearing the solid yellow state

Menu Path: service menu > select **CLEAR ERROR**
Range: KEEP, CLEAR

Clearing the error code from the Error Log resets the ASL state from the steady yellow state to the steady blue state. Select **CLEAR ERROR > CLEAR** to clear the error log.

Error Log

(Spinner® Chrono[1]™ Power models only)

About

The Spinner® Chrono™ Power console provides an error log menu that shows the most 5 current error codes and an error log that stores up to 100 error codes that can be downloaded to a USB[2] drive.

Always review the Error Log when troubleshooting an issue. The error log will contain any triggered error code event and related information. Then use the Error Code Troubleshooting Guide to help resolve the reported error code. Also, when calling Precor customer service for assistance, refer to the Error Log and report any logged error codes to the customer support representative.

Refer to the Error Code Troubleshooting Guide for error code descriptions and repair information.

Accessing the Error Log

Menu Path: service menu > select **ERROR LOG**
Range: Lists the 5 most current error codes.

Select **ERROR LOG** to access the error log information.

Menu	Description
ERROR LOG	**No Error Codes**: If there are no error codes, the line following ERROR LOG will be blank. **Logged Error Codes**: The 5 most recent error codes will be listed. Press the blue key to scroll through the error code list.

Clearing the Error Log

Menu Path: service menu > select **CLEAR ERROR**
Range: KEEP, CLEAR

Select **CLEAR** to clear (delete) error codes from the error log.

[1]Spinner® Chrono™ Power bike.

[2]Short for Universal Serial Bus, is an industry standard developed in the mid-1990s that defines the cables, connectors and communications protocols used in a bus for connection, communication, and power supply between computers and electronic devices.

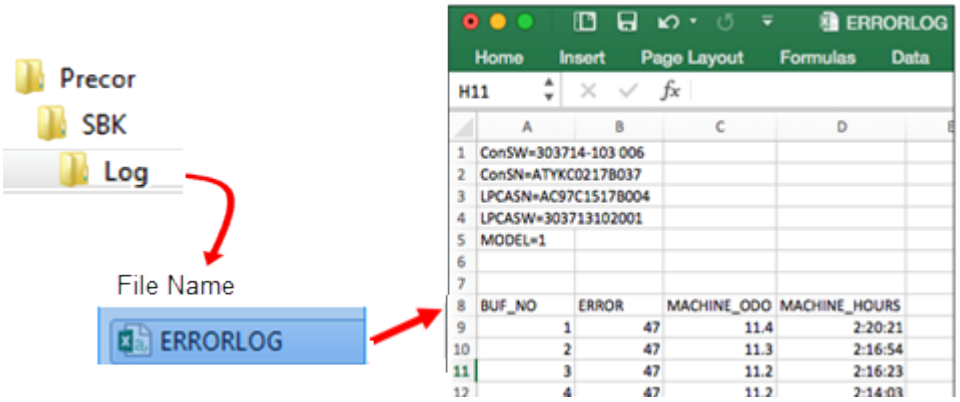
Exporting the Error Log

The list of all stored error codes (100 maximum) can be downloaded to an external properly formatted USB drive (must be less than 32 G bits). The error log file is downloaded as an Excel "CSV" formatted spreadsheet named **ERRORLOG.CSV**.

Instruction to download the stored error log codes

1. Format a USB drive (must be less than 32 G bits) with the following folder structure:

   Folder structure: C:\Precor\SBK[1]\Log



2. Insert the formatted USB drive into the console USB port.
3. Select the console **USB LOGS** menu. Wait until the console recognizes the USB drive and the blue button lights up. If the USB drive is not recognized, remove the USB and make sure the USB memory size is not greater than 32 Gbits and the folder structure is properly formatted.
4. Press the blue button to show the YES option and then the white button to select YES.
5. The console will show WAIT while the error log is downloading.
6. Then the console will show PASS when the download has successfully completed.
7. Remove the USB drive.
8. Insert the USB drive into a computer USB port and select the C:\Precor\SBK\Log**ERRORLOG.CSV** file.

[1]Spinner Indoor Cycle

System Troubleshooting Procedures

About

System troubleshooting procedures provide step by step procedures to help troubleshoot and resolve issues with the bike. Go to the system troubleshooting procedure that best fits the identified system or component with an issue.

Available procedures

"Belt Drive Issues" on the next page

"Resistance Issues" on page 151

Belt Drive Issues

Applies To

All belt drive spinner series bikes.

Issues

Issues related to the belt drive bikes:

ISSUE	CAUSE	SOLUTION
Excessive drive belt noise.	•Belt tension out-of-spec. •Worn belt.	Verify and adjust belt tension, see "Drive Belt Tension and Tracking Adjustment" on page 19. If tension is within spec, inspect belt condition and replace if worn, see "Drive Belt, Generator Belt, and Flywheel Replacement" on page 75.
Pedal slips when pedaling with power.	•Loose belt, tension out-of-spec. •Worn belt.	Verify and adjust belt tension, see "Drive Belt Tension and Tracking Adjustment" on page 19. If tension is within specification, inspect belt condition and replace if worn, see "Drive Belt, Generator Belt, and Flywheel Replacement" on page 75.
Drive belt comes off pulley	•Loose belt. •Misaligned belt pulley alignment.	Verify and adjust belt tension, see "Drive Belt Tension and Tracking Adjustment" on page 19. Check the front to rear belt pulley alignment. Cannot be adjusted, check the left/right flywheel axle bracket condition or possible a bent frame.
Excessive generator belt noise.	•Belt tension out-of-spec. •Worn belt.	Verify and adjust belt tension, see "Generator Belt Tension Adjustment" on page 27. If tension is within spec, inspect belt condition and replace if worn, see "Drive Belt, Generator Belt, and Flywheel Replacement" on page 75.

Resistance Issues

Applies To

All Spinner Series Bikes

Issue

Increasing the resistance knob does not apply typical or no increased resistance to the flywheel.

Cause

- The brake pad-flywheel gap is out of specification.
- Damaged brake pads.
- The resistance knob shaft mechanism has failed and is not adjusting the caliper brake pad arms.
- Caliper strain gauge cable has either disconnected or is bad.
- LPCA[1] failure.
- Caliper strain gauge has failed.

Solution

Verify that the resistance knob shaft is varying the caliper brake pad-flywheel distance as the resistance is varied from minimum resistance to maximum distance.

- If not, verify the resistance knob and shaft operation, see "Resistance Knob Replacement" on page 120.

Increase the resistance to maximum and make sure the brake pad-flywheel gap is within spec, see "Brake Pad Adjustment" on page 15.

Inspect the brake pads for physical damage. Replace if damaged, see "Brake Pad Replacement" on page 43.

Verify that the console is reading torque. While pedaling, access the console service menu, select the Torque[2] parameter and verify that the torque varies with change in resistance level.

- If no measure torque, make sure that the caliper strain gauge cable is connected to the LPCA strain gauge port and that the cable is not damaged.

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[1]Lower printed circuit assembly; generally this refers to the lower board. On treadmills, this is the motor controller unit (MCU), and on self-powered units, it is the main board in the lower section.
[2]Torque is a measure of the force that can cause an object to rotate about an axis. Bolt/nut example: 5 nM torque is equivalent to 5 newtons of force applied one meter from the center of the bolt, 6 ft-lb is equivalent to 6 lb of force applied 1 foot away from the center of the bolt.

- Replace the LPCA board.
- Replace the caliper assembly, see "Brake Caliper Assembly Replacement" on page 48

Erratic Power (WATTS) Measurements

About

Spinner® Chrono[1]™ Power March 16, 2018

In the last few weeks there have been a number of questions about the calibration process for the Spinner® Chrono™ Power. Here are a few key points about the calibration process.

First thing to remember: The product provides a great balance between minimal service and accuracy.

The Spinner® Chrono™ Power is calibrated at the factory, and automatically calibrates thereafter. No calibration task is required at the time of installation or as a periodic operation performed by the facility staff.

Auto-calibration "AutoCal"

Like any measurement system, the Spinner Chrono Power needs to reset the known zero point. This is known as zero offset calibration. The Spinner bike will sense when the rider has stopped pedaling, essentially when the RPMs are at zero. That's when it will automatically perform this calibration. Customers who want to ensure the best power measurement are advised to turn the resistance to knob fully to left to the off position (zero resistance) at the end of every ride, and before pedaling begins again. This ensures there is no torque on the system when the calibration is performed.

Wattage flux:

When a power meter is used for the first time, riders commonly comment that the wattage measurement "appears jumpy". This is NORMAL. There are constant deviations in the force and velocity during every aspect of the rider's pedal stroke. Given that the power meter measurement is immediate, instantaneous wattage can appear to be jumpy, especially to riders accustomed to training with heart rate or RPM, which tends to remain relatively steady.

Since it is normal to see this fluctuation, it is important to view wattage as more of a target range rather than a direct aim. In fact, most instructors call out a wattage range for the riders to aim for. When riders learn to manage their speed and pedal stroke technique along with appropriate resistance and cadence, variations in wattage measurements will decrease. Wattage fluctuations are also decreased with proper body alignment on the bike and natural body movement. Keeping an eye on wattage assists the rider in fine-tuning their riding skills to develop sound performance on the bike.

Service:

Precor Service Technicians can perform service tests to troubleshoot the system, including torque, WATTS, RPM, battery and generator voltage and amps, and display elements. If your customer believes they have a bike with a Watts measurement issue, it may be caused by several factors other than the measurement system itself. A service call will identify the cause and

[1]Spinner® Chrono™ Power bike.

a Precor service technician will be able to restore the bike to a fully functional condition. Be sure to contact service@precor.com with any service needs.

Preventive Maintenance

About

Preventative maintenance is proven to extend the life of the equipment, improve the user experience, and keep maintenance problems and service calls to a minimum.

IMPORTANT: It is the responsibility of the owner to maintain equipment in accordance with the Precor recommended preventative maintenance schedule. Following the preventative maintenance schedule is required to maintain warranty coverage.

Maintenance Schedule

Preventative maintenance tasks are grouped into Daily, Weekly, Monthly, Quarterly, and Semi-annual scheduled maintenance tasks (scheduled maintenance tasks are equipment model specific). Refer to the equipment maintenance guide for schedule and maintenance task information:

- Spinner® Rally, Shift, and Ride, see Spinner® Rally, Shift, and Ride Maintenance Guide
- Spinner® Chrono[1]™ Power and Climb, see Spinner® Chrono™ Power and Climb™ Maintenance Guide

TIP: You can also download the Preventative Maintenance Guide from the Precor.com equipment home page.

IMPORTANT: If you determine that the equipment needs service, disconnect all power connections (television, Ethernet, and power) and move the equipment away from the exercise area. Place an OUT OF SERVICE sign on the equipment and make it clear to all patrons and other users that they must not use it.

Precor Preventative Maintenance Plan

Precor offers a Preventative Maintenance Service Plan that uses Precor-certified technicians to perform the equipment regularly scheduled weekly, monthly, quarterly, and semi-annual maintenance tasks. For more information and to sign up, visit the Preventative Maintenance Program web site.

[1]Spinner® Chrono™ Power bike.

Parts

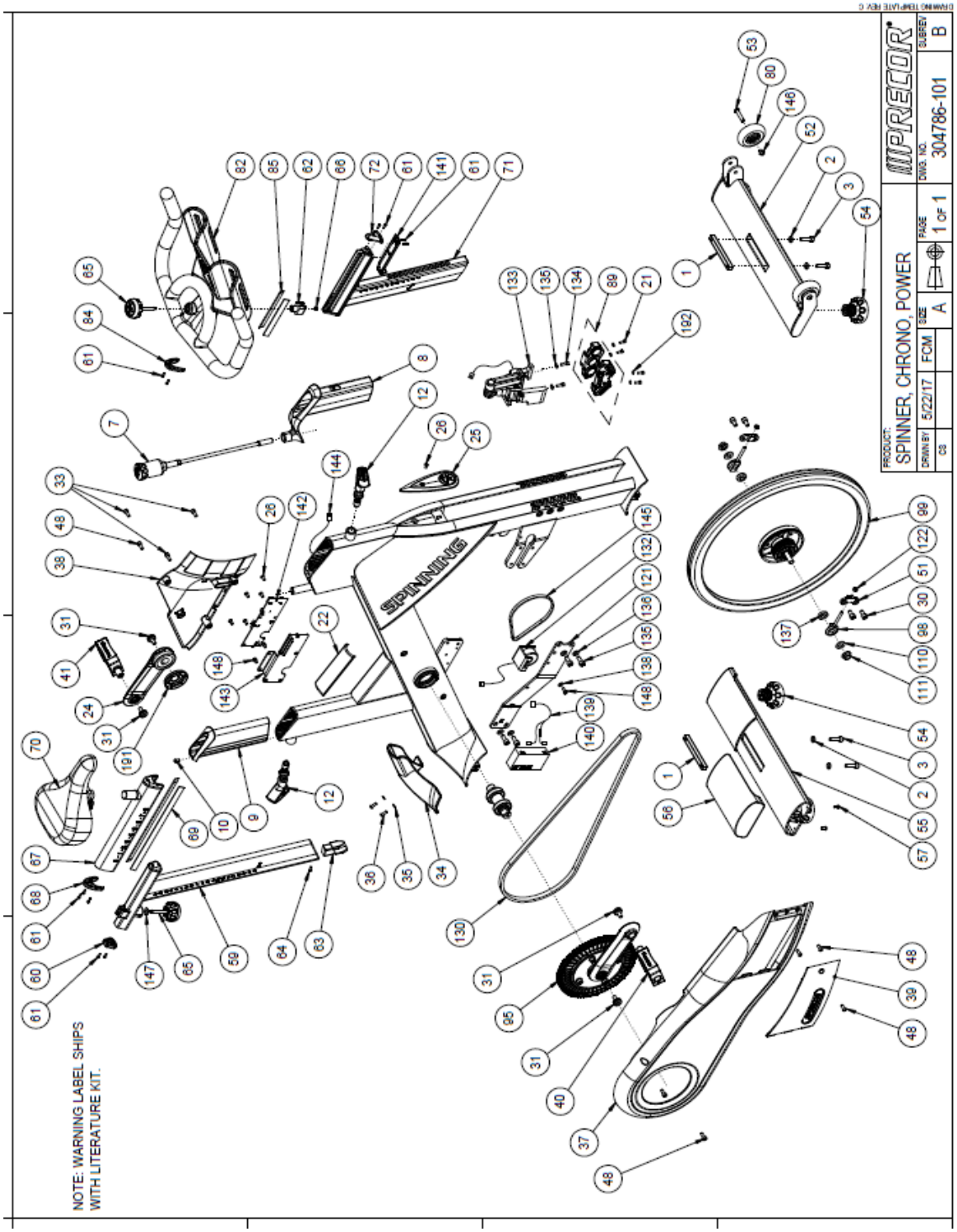
About

The following copies of the equipment *"Exploded View Diagram"* and *"Parts Identification List"* are provided for you to use as a quick reference. It is recommended that you go to the servicer partners Precor Connect website to view the most current parts information including the *Exploded View Diagram* and *Parts Identification List*.

- Precor Connect website

Exploded View Diagram

Refer to the servicer partners Precor Connect website to view the most current information.



Parts List

Refer to the servicer partners Precor Connect website to view the most current information.

Bubble Numbers	Part Number	Item Description
1	PPP000000RX3TZ7000	BAR, STABILIZER MOUNT
2	PPP000000RX3R4J000	WASHER, M8
3	PPP000000RX3V0Q000	BOLT, M8X30
7	PPP000000RX3V6V000	ASSY, BRAKE ROD
8	PPP000000RX3TYJ000	SLEEVE, HANDLEBAR
9	PPP000000RX3TYL000	SLEEVE, SEAT POST
10	PPP000000RX3FYL000	SCREW, BUTTON HEAD, M6
12	PPP000000RX3V74000	ASSY, SELECTOR PIN
21	PPP000000RX3R4X000	SHCS, M4X0.7
22	PPP000000RX3V72000	ASSY, COVER, STEP THRU
24	PPP000000RX3TZG000	CRANK, LEFT
25	PPP000000RX3V73000	ASSY, BADGE
26	PPP000000RX0JZT000	SCREW, M5
30	PPP000000RX0JUU000	NUT, NYLOCK, M6
30	PPP000000RX3EJS000	SHCS, M8 X 16, E-COAT
31	PPP000000RX3TZL000	BOLT, CRANK
33	PPP000000RX3NV0000	SHCS, M6X1.0X20
34	PPP000000RX3U0P000	COVER, STRETCH PAD
35	PPP000000RX0J4D000	WASHER, STRETCH PAD
36	PPP000000RX0JZU000	SCREW, STRETCH PAD
37	PPP000000RX3U0Q000	COVER, DRIVE SIDE
38	PPP000000RX3U0R000	COVER, NON DRIVE SIDE
39	PPP000000RX3V75000	ASSY, COVER, ACCESS PANEL
40	PPP000000RX3TZK000	PEDAL, RIGHT
41	PPP000000RX3TZJ000	PEDAL, LEFT
48	PPP000000RX3VAV000	SCREW, BUTTON HEAD, M6X1.0X16, E-COAT
51	PPP000000RX3TZZ000	FIXED ADJUST, FLYWHEEL
52	PPP000000RX3TYT000	STABILIZER, FRONT, WELDMENT
53	PPP000000RX3TZ1000	AXEL, WHEEL
54	PPP000000RX3TZ2000	FOOT, ADJUSTABLE
54	PPP000000RX3TZ2000	FOOT, ADJUSTABLE
55	PPP000000RX3TZ4000	STABILIZER, REAR, WELDMENT
56	PPP000000RX3V7C000	ASSY, COVER, REAR STABILIZER
57	PPP000000RX3AD0000	BOLT, M5X0.8
59	PPP000000RX3TY6000	WELDMENT, SEAT POST
60	PPP000000RX3TYA000	ENDCAP, SEAT POST
61	PPP000000RX0JU0000	SHCS, M3X8
62	PPP000000RX3TY5000	BLOCK, FIXED
63	PPP000000RX3TYB000	BUMPER, SEAT POST
64	PPP000000RX1550000	FHMS, M4
65	PPP000000RX3TY2000	KNOB, HANDLEBAR
66	PPP000000RX30YZ000	NUT, NYLOCK, M5X0.8
67	PPP000000RX3TYC000	WELDMENT, SEAT SLIDE
68	PPP000000RX3TYF000	ENDCAP, SEAT SLIDE
69	PPP000000RX3TYG000	GLIDE, SEAT
70	PPP000000RX3TYH000	SEAT
71	PPP000000RX3TXP000	WELDMENT, HANDLEBAR POST
72	PPP000000RX3TXR000	ENDCAP, HB FIXED
80	PPP000000RX3TZ0000	WHEEL
82	PPP000000RX3TXT000	ASSY, HANDLEBAR

84	PPP000000RX3TY0000	ENDCAP, HANDLEBAR
85	PPP000000RX3TY1000	GLIDE, HANDLEBAR
86	PPP000000RX3V2D000	SHCS, M8X1.25
89	PPP000000RX3V6X000	ASSEMBLY, MAGNET SET
89.1	PPP000000058248101	CS KIT, MAGNET GAP FIXTURE
95	PPP000000RX3V79000	ASSEMBLY, DRIVE CRANK
98	PPP000000RX3TZW000	FLYWHEEL ADJUST TUG
99	PPP000000RX3V6U000	ASSY, FLYWHEEL
110	PPP000000RX3U6E000	WASHER, M12X2.5
111	PPP000000RX3U6B000	NUT, FLYWHEEL, M12X1.25
121	PPP000000RX3U0M000	BRACKET, CROSS MEMBER
122	PPP000000RX32RA000	NUT, FLYWHEEL ADJUST
130	PPP000000RX3U6N000	BELT, CONTI 1440
132	PPP000000RX3V76000	ASSEMBLY, GENERATOR
133	PPP000000RX3V6W000	ASSY, BRAKE, POWER
134	PPP000000RX20QC000	SHCS, M5X0.8
135	PPP000000RX3FXR000	WASHER, M5
135	PPP000000RX3SCQ000	SHCS, M6
136	PPP000000RX3SCM000	WASHER, M6
137	PPP000000RX3TZV000	SPACER, AXLE, FLYWHEEL
138	PPP000000RX3LMW000	WASHER, M5
139	PPP000000RX3U24000	CABLE, BATTERY
140	PPP000000RX3U26000	BATTERY
141	PPP000000RX3TXS000	COVER, CABLE
142	PPP000000RX3U27000	LPCA
142.1	PPP000000013289060	ASSY,CBL,USB 2.0, A MALE/MOD,6P6C,PWR,60 IN(
143	PPP000000RX3U0J000	BRACKET, LPCA
144	PPP000000RX3U23000	CABLE, COMMUNICATION
145	PPP000000RX3U6L000	BELT, GENERATOR
146	PPP000000RX3VFE000	SCREW, BUTTON HEAD, M6 X10
147	PPP000000RX3VFF000	WASHER, SEAT KNOB, POM, 8X18X2.1
148	PPP000000RX3FYN000	SHCS, M5 X 8
148	PPP000000RX3SCP000	SCREW, M5
191	PPP000000RX3ULZ000	COVER, BB
192	PPP000000RX0J66000	FLAT WASHER

Consoles

About

The self-powered Spinner® Chrono[1]™ Power bike models use the Spinner® Chrono™ console and the non-powered Spinner® Climb™ models use the Spinning® Studio Console.

Select the link for console service and maintenance information:

"Spinner® Chrono™ Console" on the facing page

"Spinning® Studio Console" on page 170

Spinner® Chrono™ console

Spinning® Studio Console

[1]Spinner® Chrono™ Power bike.

Spinner® Chrono™ Console

(Spinner® Chrono[1]™ Power models only)

About

The Spinner® Chrono™ console is only available on the Spinner® Chrono™ Power model indoor cycle. In addition to the primary workout display information, there is a service/setup mode that allows console configuration setup and service diagnostic tests and cycle software and use information data:

Club Parameters: Use Club Parameter settings to choose the type of information you want exercisers to see on the console while working out.

Informational Settings: The Information Settings contain the information required when you contact Precor Customer Support including serial numbers, software program versions, odometer and error log summary, and model numbers.

Operational Information: The operating Torque[2], WATTS, and RPM values.

Service Tests: Perform tests to help you troubleshoot systems including torque, WATTS, RPM, battery, generator and console display.

Console Power

The console is powered from the bike generator and does not need batteries to operate. Start pedaling to power ON, continue pedaling to keep the console ON, The console uses power from the 6 Vdc battery to keep the console powered ON for 90 seconds after the pedals have stopped.

USB[3] Port

The console provides a USB port for program updates, system settings cloning between consoles, to download system information, and download error log data.

Active Status Light (ASL[4])

The console also provides Active Status Light "ASL" functionality to identify the current operating condition and an error log that stores error event codes to help troubleshoot and identify faults that may cause problems with the bike operation. .

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[1]Spinner® Chrono™ Power bike.

[2]Torque is a measure of the force that can cause an object to rotate about an axis. Bolt/nut example: 5 nM torque is equivalent to 5 newtons of force applied one meter from the center of the bolt, 6 ft-lb is equivalent to 6 lb of force applied 1 foot away from the center of the bolt.

[3]Short for Universal Serial Bus, is an industry standard developed in the mid-1990s that defines the cables, connectors and communications protocols used in a bus for connection, communication, and power supply between computers and electronic devices.

[4]Active Status Light: Service and maintenance status light.

Note: Refer to the SPINNER® CHRONO™ CONSOLE "*Operators Guide*" for the latest console installation, operation, and service information.

- Operator's Guide
- Getting Started Guide

Features

- **Self-Powered Console:** The console is powered from the bike generator and does not require batteries. The backup battery is used to power the console for 90 seconds after the pedals stop.
- **USB port**: The console provides a USB port located on the top back of the console to update software
- **ANT+**[1] **and bluetooth connectivity**: The console supports ANT+ (2.4 GHZ) and bluetooth wireless heart rate monitor chest straps (however the Polar or Suunto ANT+ brand heart rate monitor chest straps are not supported).
- **ASL light**: There is an ASL (Active Status Light) maintenance light located at the top back of the console to indicate maintenance and fault status information, see the ASL topic for more information.
- **Error Log**: Supports an Error Log and error event codes to help trouble shoot electrical issues, see Troubleshooting Error Code topic.

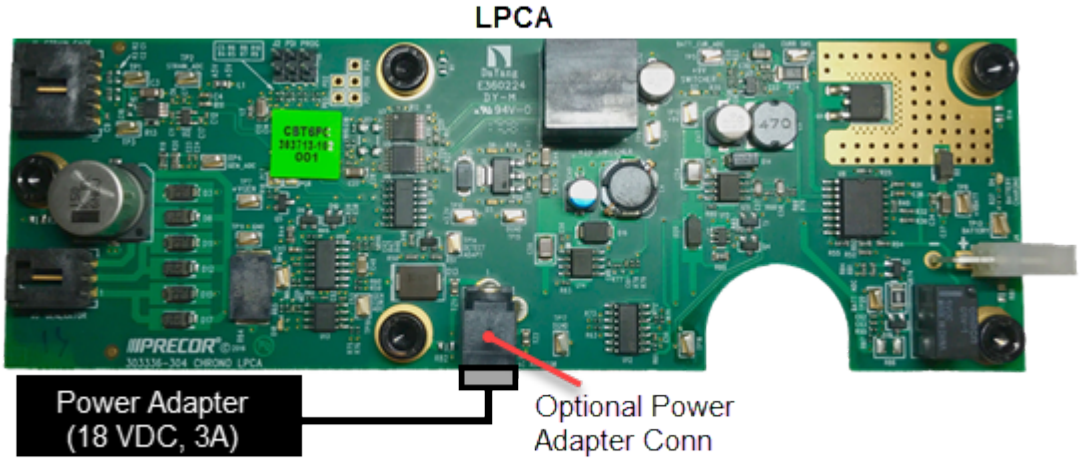
Powering ON the Console

To power ON the console, start pedaling the bike.

[1]ANT+ (pronounced ant plus) is a wireless protocol for monitoring sensor data such as a person's heart rate or a bicycle's tire pressure

Optional AC[1] Power Adapter:

You can also use an optional universal 18 Vdc 3 Amp power supply that plugs into the LPCA[2] board to power the console. This is the same power supply part number (PN 12306-103 or 12306-104 UNIVERSAL AC POWER ADAPTER) that is also used on AMTs.

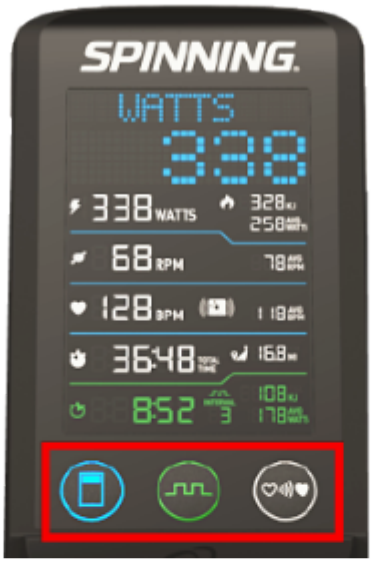


Installation and Removal

For installation and removal instructions, see the SPINNER® CHRONO™ CONSOLE "Operators Guide", see Operator's Guide.

[1]Alternating Current: electric current which periodically reverses direction between positive and negative polarity.
[2]Lower printed circuit assembly; generally this refers to the lower board. On treadmills, this is the motor controller unit (MCU), and on self-powered units, it is the main board in the lower section.

Service/Setup Menu Access



1) Alway begin at the ***Welcome*** screen..

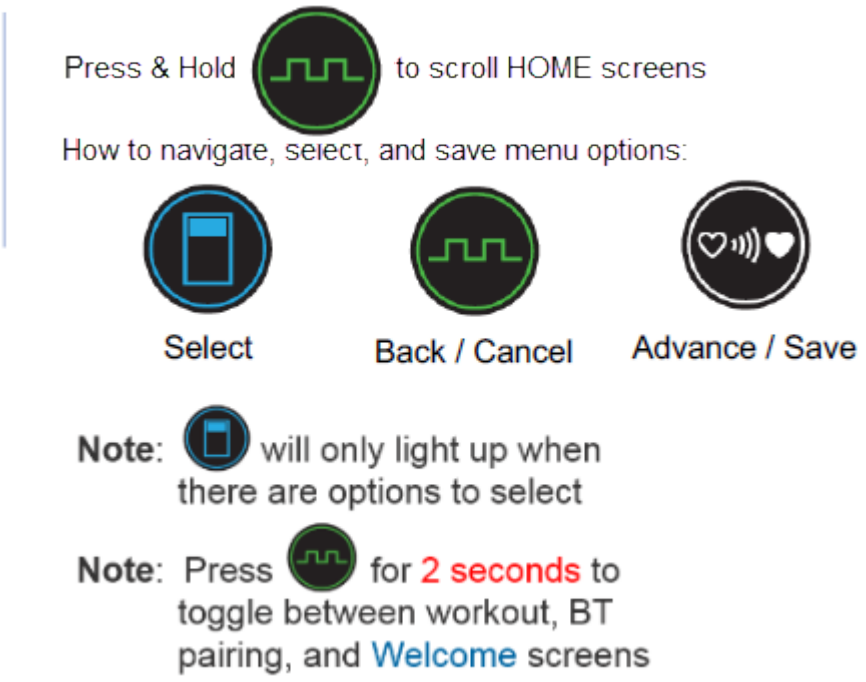
2) Press the following buttons.

3) Press & Hold > Blue button 

4) Press White > Green > Green > White

Menu Navigation

The menus are accessed sequentially by scrolling through the list of menus in a forward or reversed direction using the following console buttons. You cannot directly access a menu item.



Menus and Settings

Note: Refer to the SPINNER® CHRONO™ CONSOLE "Operators Guide", at Operator's Guide, for the latest console menu information.

Club Settings Parameters

Use the Club Settings to choose the type of information accessible to the exercisers.

Setting	Description	Setting options (default in bold)
UNITS	Speed and distance measurements	**MPH**, KPH
BACKLIGHT	Three is the brightest setting	**3**, 1, 2
DISP MODE	Energy measurements	**SPINPOWER**, CAL, KJ
ASL SETUP	Active Status Light (ASL): Turns on and tests light so its color alerts owner of bike maintenance issues	**ON**, OFF, YELLOW ON, BLUE ON
BT PAIRING	Turn ON so that exerciser's can pair their phone to save their workout information	**SHORT**, ON, OFF
MAJOR INSP	• After routine inspection and maintenance, **clear** this setting to reset the ASL to steady blue, clear the error log, and reset the maintenance value back to the maintenance default. • The maintenance default is 1000 miles • Change this default using a Setup.ini file	**KEEP**, CLEAR
CLEAR ERROR	Select **CLEAR** to delete errors from the error log	**KEEP**, CLEAR
DEVICE ID	The default number is based on the product lower serial number	Default ID # (Can be customized using the blue button)
LANGUAGE	• Service mode is English only • Select the language for all exercisers	**ENGLISH**, SPANISH, FRENCH, GERMAN
SETUP	For use with USB stick during setup	**NO**, YES
RESET	Returns all settings to factory defaults, except system information (number of workouts, hours, and distance)	**NO**, YES
PROGRAM	For use with USB stick during software upgrades	**NO**, YES

Information Settings Parameters

The Information Settings contain the information required when you contact Precor Customer Support including serial numbers, software program versions, odometer and error log summary, and model numbers.

Note: It is possible to record system information and the error log on a properly formatted USB drive.

Setting	Description
CONS SN	Console serial number that is printed on a label on the back of the console
LPCA SN	Serial number for the printed circuit board in the base, which is also the base equipment serial number
TOP SW	Versions of CONS and GEM software are in console
CONS SW	One of the two software programs in console
GEM SW	One of the two software programs in console
LPCA SW	Software part number for the printed circuit board in the base
ODOMETER	Total distance (in miles) on bike
HOURS	Total hours of use on bike
WORKOUTS	Total number of workouts on bike
ERROR LOG	• If there are no errors, then there will be nothing below the title. • If there are errors, the five most recent errors appear. Press the blue key to navigate through the error list.
MODEL TYPE	Bike model number

Operational Information

Setting	Description
Torque	Reported strain gauge force (in-lb)
WATTS	Reported power = Total torque x RPM (WATTS)
RPM	Revolutions per minute (pedal rate)

Service Tests

Perform tests to help you troubleshoot systems including torque, WATTS, RPM, battery and generator voltage and amps, and display elements.

Press the white button to move from one test to the next.

Setting	Description
DISP TEST	Tests the display to make sure all elements are working. Select **YES** to test the display. No is the default.
BAT VOLT	Battery voltage: While you pedal or if you have an external charger installed, the voltage will appear high because the battery is charging. When you stop pedaling, you will see the actual (true) voltage.
BAT AMP	Battery amp: Battery current being discharged.
GEN VOLT	Generator voltage: Speed of pedaling affects the voltage number.
GEN AMP	Generator amp: Current being supplied by generator.
USB LOGS	Data from this setting is stored in Log directory.

Error Log Information

Accessing the Error Log

Select the service menu **ERROR LOG** menu to access the error log information.

Menu	Description
ERROR LOG	• If there are no errors, there line following the title will be blank. • If there are detected error codes, the 5 most recent error codes will be listed.

Clearing the Error Log

Select **CLEAR ERROR** menu item to clear the error log.

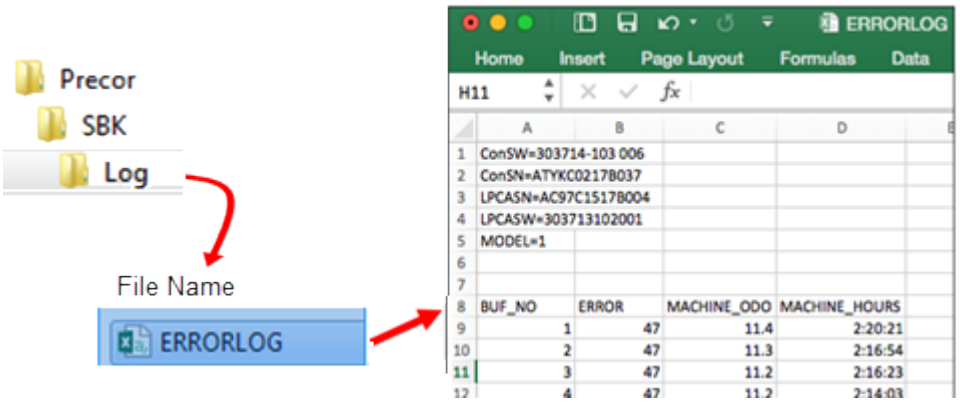
Saving error log codes to an external USB drive

The list of all stored error codes (100 maximum) can be downloaded to an external properly formatted USB drive (must be less than 32 G bits). The error log file is downloaded as an excel "CSV" formatted spreadsheet named **ERRORLOG.CSV**.

Instruction to download the stored error log codes

1. Format a USB drive (must be less than 32 G bits) with the following folder structure:

   Folder structure: C:\Precor\SBK[1]\Log



2. Insert the formatted USB drive into the console USB port.
3. Select the console **USB LOGS** menu. Wait until the console recognizes the USB drive and the blue button lights up. If the USB drive is not recognized, remove the USB and make sure the USB memory size is not greater than 32 Gbits and the folder structure is properly formatted.
4. Press the blue button to show the YES option and then the white button to select YES.
5. The console will show WAIT while the error log is downloading.
6. Then the console will show PASS when the download has successfully completed.
7. Remove the USB drive.

[1]Spinner Indoor Cycle

8. Insert the USB drive into a computer USB port and select the C:\Precor\SBK\Log**ERRORLOG.CSV** file.

Spinning® Studio Console

About

The Spinning® Studio Console is used on the Spinner® Climb™ indoor cycle. This console is also used on Precor Spinner® Ride™, Spinner® Shift™, and Spinner® Rally™ model indoor cycles.

Refer to the SPINNING STUDIO "Owner's Manual" for the latest console installation, use, and service information.

- Operator's Guide

Features

- **Battery Powered Console and Cadence Sensor:** The console is powered by 3 - AAA batteries and the Cadence sensor uses a CR2032 lithium coin cell battery.
- **ANT+[1] connectivity**: The console supports ANT+ wireless heart rate monitor chest straps (however the Polar or Suunto ANT+ brand heart rate monitor chest straps are not supported).
- **Program Memory**: The console maintains programming code during battery replacement.

[1]ANT+ (pronounced ant plus) is a wireless protocol for monitoring sensor data such as a person's heart rate or a bicycle's tire pressure

Cadence (RPM) sensor installation

The Cadence sensor is battery operated and uses a CR2032 lithium coin cell battery.

For instructions to install the cadence sensor, see the *Cadence Sensor Installation* chapter in the *Operators Guide*, see Operator's Guide.

Heart Rate Belt Bluetooth Pairing

For instructions to use and pair a bluetooth heart rate belt, see the *Pairing with your Heart Rate Belt* chapter in the *Operators Guide*, see Operator's Guide.

Service and Maintenance

All information regarding the console installation, operation, service, and maintenance is provided in the "*Spinning Studio Computer*" Operator's Guide.

Appendix A : Edition Information

Edition

Title: SBK800 Spinner Chrono[1] Bike Line Service Manual

P/N: 20039-301

Additional Documentation

You can also view the service manual online at Online Service Manual

Copyright

Precor Incorporated
20031 142nd Ave. NE
P.O.Box 7202
Woodinville, WA. 98072-4002
Ph: 1-800-347-4404

[1]Spinner® Chrono™ Power bike.

Appendix B : Notices and Safety

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Safety Notices

Warning and Caution notices indicate an activity that could be dangerous and cause personal injury and/or equipment damage if not adhered to. Always follow Warning and Caution instructions.

[1]Adaptive Motion Trainer

[2]Elliptical Fitness CrossTrainer

Warning

A **WARNING** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood.

Caution

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood.

Service Safety Guidelines

Prior to doing any machine service, review the Service Safety Guidelines, see Service Safety Guidelines.