

 **BOWFLEX**
REVOLUTION



**The Bowflex Revolution[®],
Revolution[®]XP, and Revolution[®]FT
Home Gym
Service Manual**

POWERED BY
 **SPIRAFLEX**

Table of Contents

Specifications / Approvals	3
Revolution Models.....	4
Preventative Maintenance	5
Untangle Derailed Rope.....	6
Adjust Rope Tension	15
Replace Cam Assembly.....	15
Replace Rope	22

Specifications

Product Specifications

Product Weight	Revolution®	336.2 lbs. (152.5 kg)
	Revolution® FT	234.3 lbs. (106.1kg)
	Revolution® XP	291.2 lbs. (131.4kg)
	XP with Lat Tower	319.9 lbs. (144.4kg)
Shipping Weight	Revolution®	414.46 lbs (188.1kg)
	Revolution® FT	253.9 lbs. (115.1kg)
	Revolution® XP	316.6 lbs. (143.5kg)
	XP with Lat Tower	350.8 lbs. (159kg)
Product Dimensions	Revolution®	112" L x 63" W x 73" H (284cm x 160cm x 185cm)
	Revolution® FT	64.5" L x 37.8" W x 73" H (163.8cm x 98cm x 185.4cm)
	Revolution® XP	64.5" L x 37.8" W x 73" H (163.8cm x 98cm x 185.4cm)
	XP with Lat Tower	64.5" L x 37.8" W x 83.2" H (163.8cm x 98cm x 211.3cm)
Workout Area	Revolution®	112" x 63" (284cm x 160cm)
	Revolution® FT	84" x 64" (213.4cm x 162.6cm)
	Revolution® XP	84" x 64" (213.4cm x 162.6cm)
	XP with Lat Tower	84" x 64" (213.4cm x 162.6cm)
Number of Exercises	Revolution®	90+
	Revolution® FT	80+
	Revolution® XP	90+
	XP with Lat Tower	90+
SpiralFlex® Resistance	Revolution®	220 lbs (99.8 kg)
	Revolution® FT	200 lbs (90.7 kg)
	Revolution® XP	200 lbs (90.7 kg)
	XP with Lat Tower	200 lbs (90.7 kg)
SpiralFlex® Upgradability	Revolution®	300 lbs. (136 kg)
	Revolution® FT	280 lbs (127 kg)
	Revolution® XP	280 lbs (127 kg)
	XP with Lat Tower	280 lbs (127 kg)
User Weight Limit	Revolution®	300 lbs (136 kg)
	Revolution® FT	300 lbs (136 kg)
	Revolution® XP	300 lbs (136 kg)
	XP with Lat Tower	300 lbs (136 kg)

Revolution Models



Revolution®



Revolution® FT



Revolution® XP

Preventative Maintenance

Daily

Wipe down with a damp cloth. Pay special attention to areas where perspiration could settle.

Monthly

Inspect the unit for loose parts, nuts, bolts, etc.. Inspect ropes and straps for fraying or excessive wear.

Yearly

Remove the Top Cover and inspect the condition of the internal components. look for fraying or excessive wear on straps, ropes, and moving parts and replace as necessary.



Note:

Before adding or removing resistance packs, spray a light coating of silicone lube on the shaft. This will allow the packs to slide easily on and off the shaft.

Maintenance Procedures

Untangle Derailed Rope

Tools needed:

- 1/8" Allen Wrench
- 6" Phillips Screwdriver
- 7/32" Allen Wrench

Note: All instructions in this bulletin are given with the orientation of standing facing the engine with the bench behind you.

Instructions:

Before beginning this procedure, remove all resistance packs except for the attached pre-stretch pack.

Step 1: Remove Top Cover

1-1 Use a 1/8" allen wrench to remove the four allen bolts that secure the Top Cover. See **Figure 1**. Set bolts aside for Step 14.

1-2 Remove Top Cover and set aside.

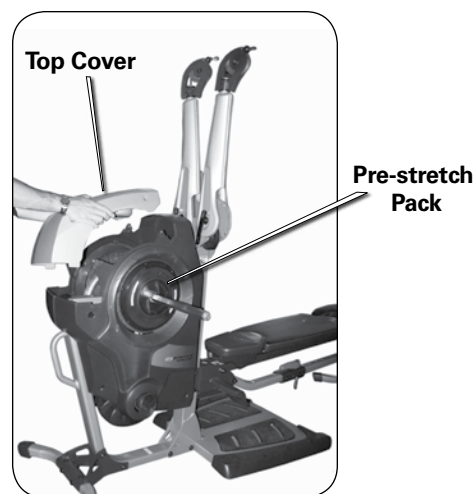


Figure 1

Step 2: Remove Shroud Clip.

2-1 If there is a Clip securing the shrouds under top inside, remove the Clip. (The clip may already have been removed after shipping.) See **Figure 2**. Set Clip aside for Step 11.

If Clip is not present, go to Step 3.

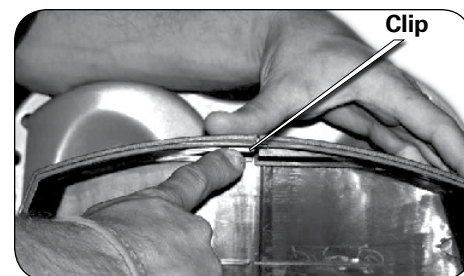


Figure 2

Maintenance Procedures

Untangle Derailed Rope (continued)

Step 3: Remove Tension Adjust Knob Cap

- 3-1 Use a phillips head screwdriver to remove the screw securing Tension Adjust Knob Cap (**Figure 3a**) and set aside for Step 13.
- 3-2 Once the Screw is removed, use the screwdriver to gently pry the cap out of the knob (**Figure 3b**).

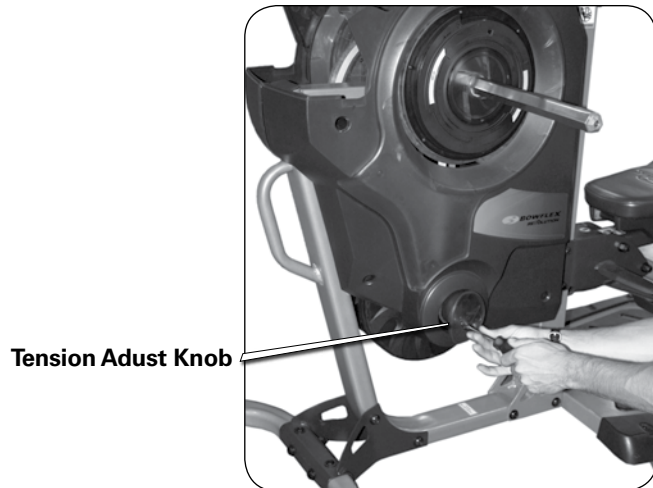


Figure 3a

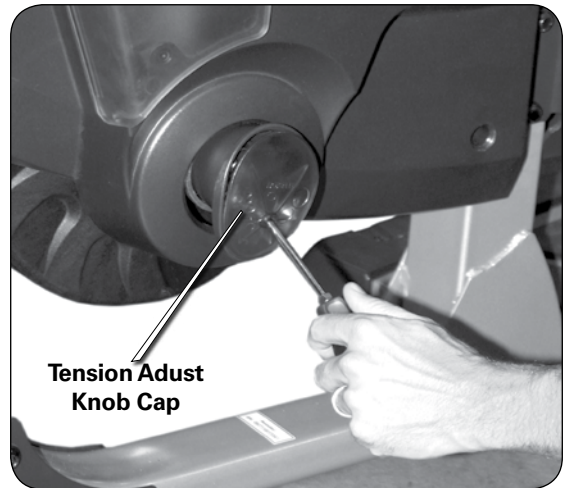


Figure 3b

Step 4: Remove Tension Adjust Knob.

- 4-1 Use a phillips head screwdriver to remove the four screws securing the Tension Adjust Knob. See **Figure 4**. Set screws aside for Step 12.
- 4-2 Remove the Tension Adjust Knob and set aside.

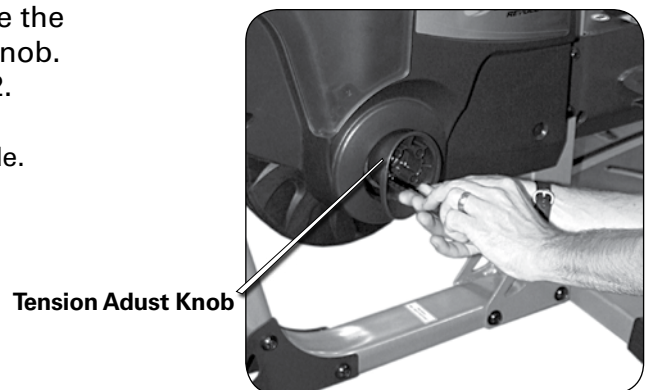


Figure 4

Maintenance Procedures

Untangle Derailed Rope (continued)

Step 5: Remove Shroud

5-1 Use a phillips head screwdriver to remove the five screws securing the shroud (one longer screw and four shorter screws). Set screws safely aside for Step 10.

5-2 Remove the Shroud and set aside. See **Figure 5**.

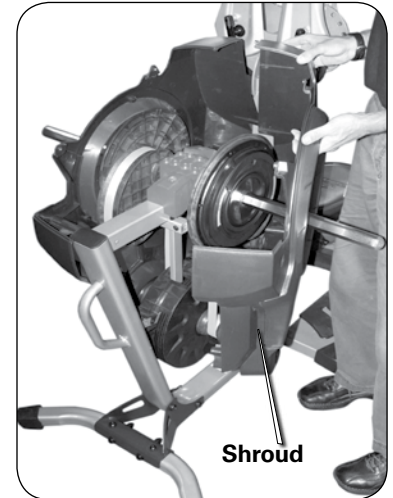


Figure 5

Step 6: Remove Lower Spool

6-1 Use a 7/32" allen wrench to remove the bolt securing the Lower Spool. See **Figure 6a**. Set bolt aside for Step 9.

6-2 Remove the Spool (Figure 6a), unwrap the Strap (Figure 6b), and hook the Spool behind the frame (**Figure 6c**) to keep it out of your way.



Figure 6a



Figure 6b

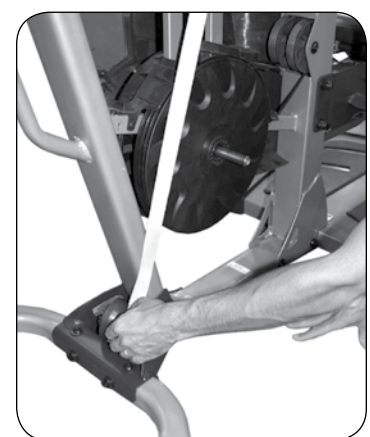


Figure 6c

Maintenance Procedures

Untangle Derailed Rope (continued)

Step 7: Remove Large Pulley.

7-1 Slide the Large Pulley (Figure 7a) and tangled Rope (Figure 7b) off of the axle.



Figure 7a

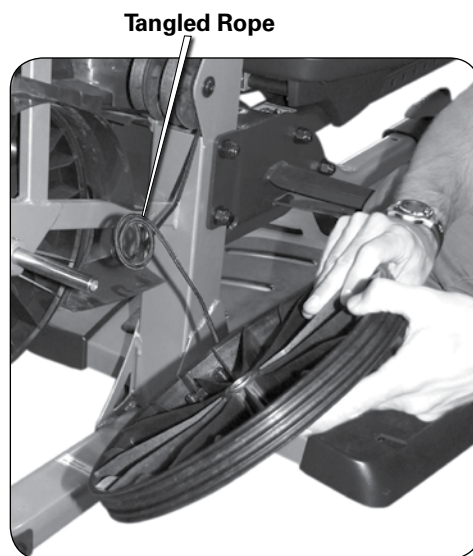


Figure 7b

Maintenance Procedures

Untangle Derailed Rope (continued)

Step 8: Re-wrap Rope

8-1 Begin to re-wrap the rope in the outer most channel on the Large Pulley (**Figure 8a**).

8-2 Slide the Large Pulley back onto the axle and finish wrapping the Rope by turning the Large Pulley in a clockwise direction.

NOTE: Do not let go of the Large Pulley. (**See Figure 8b.**) Keep tension on the Rope to make sure it stays in the channel while performing the next step.



Figure 8a

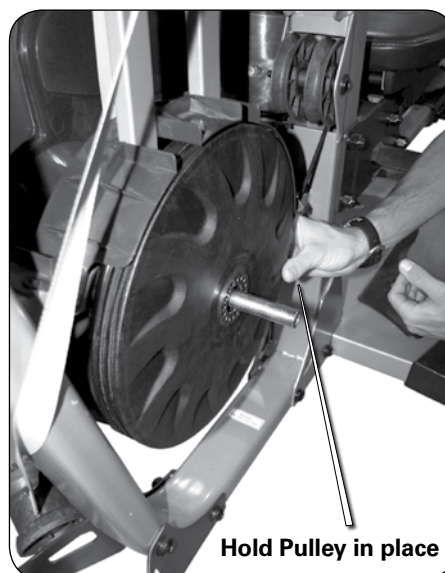


Figure 8b

Maintenance Procedures

Untangle Derailed Rope (continued)

Step 9: Replace Lower Spool.

9-1 While still holding the Large Pulley in place, coil the Strap around the Spool in a counter clockwise direction. (See Figure 9a).

9-2 Slide the Spool back onto the axle (Figure 9b) and secure the Lower Spool with allen bolt (Figure 9c).



Figure 9a



Figure 9b



Figure 9c

Maintenance Procedures

Untangle Derailed Rope (continued)

Step 10: Replace Shroud.

- 10-1 Make sure that the right Rope (**Figure 10a**) passes above the flat guide to the upper right side of the Pulley.
- 10-2 Replace the Shroud (**Figure 10b**) making sure the left Rope passes between the guides on the inside of the Shroud (**Figure 10c**) and beneath the “fender” on the left side of the Pulley (**see Figure 10a**).
- 10-3 Secure the Shroud with five phillips head screws (one longer screw and four shorter screws) from Step 5. Note the location for the long screw in **Figure 10d**.

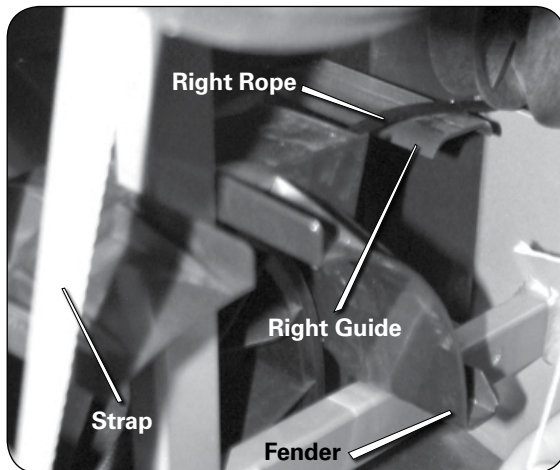


Figure 10a - Right rope and rope guide (pulley not shown)



Figure 10b

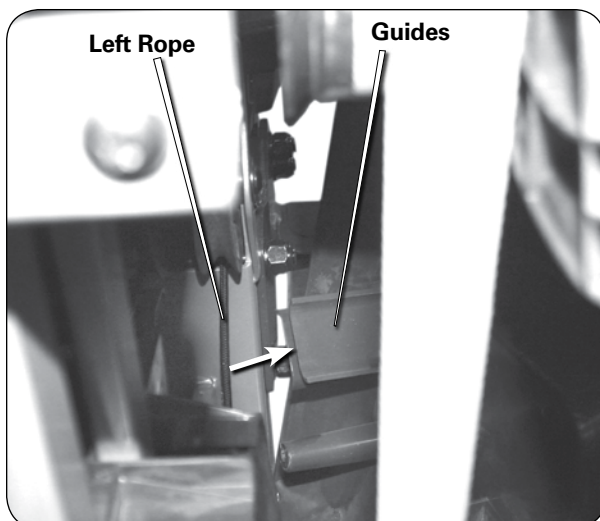


Figure 10c - Left rope and rope guides

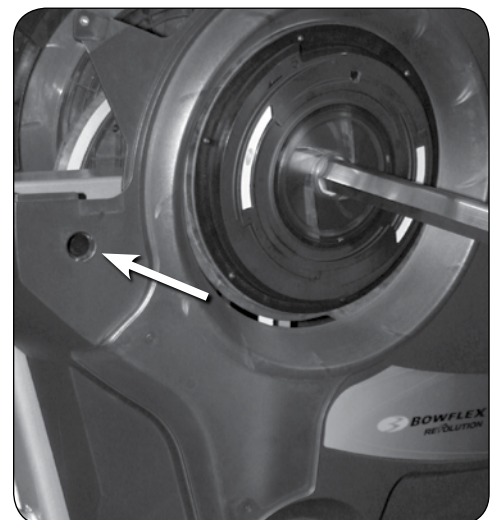


Figure 10d - Location of long screw to secure shroud

Maintenance Procedures

Untangle Derailed Rope (continued)

Step 11: Replace Shroud Clip

11-1 Replace the Clip securing the shrouds under top inside. See **Figure 11**.

If there is no Clip, go to Step 12.

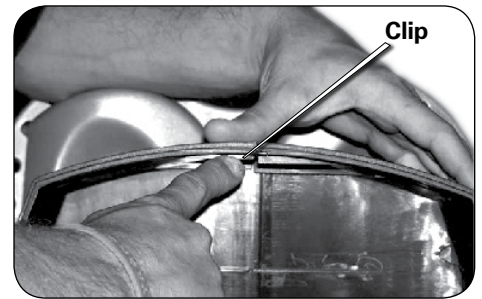


Figure 11

Step 12: Replace Tension Adjust Knob

12-1 Use a phillips head screwdriver and four screws to secure the Tension Adjust Knob. See **Figure 12**.

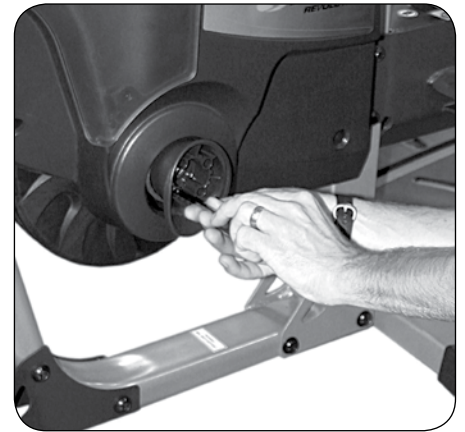


Figure 12

Step 13: Replace Tension Adjust Knob Cap

13-1 Use a phillips head screwdriver and one screw to secure the Tension Adjust Knob Cap. See **Figure 13**.



Figure 13

Maintenance Procedures

Untangle Derailed Rope (continued)

Step 14: Replace Top Cover

- 14-1** Use a 1/8" allen wrench and four allen bolts from step 1 to secure the Top Cover. See **Figure 14**.



Figure 14

Step 15: Adjust Rope Tension

- 15-1** Pull out Tension Adjust Knob and rotate Large Pulley in a clockwise direction until it stops, then release the Tension Adjust Knob to lock. See **Figure 15**.

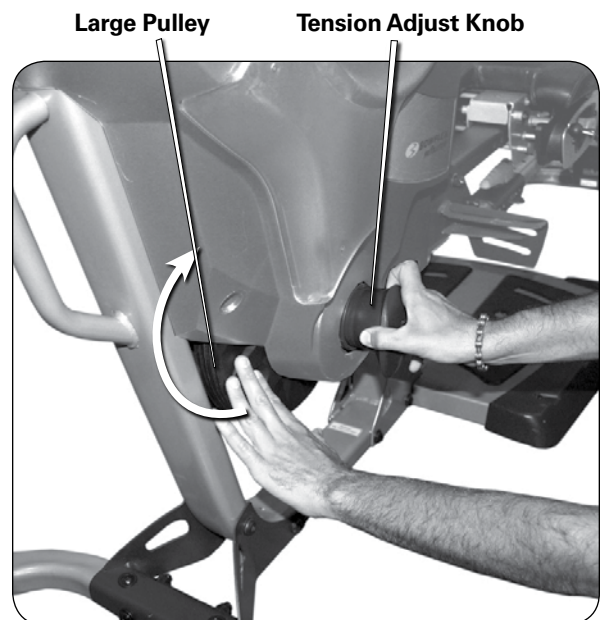


Figure 15

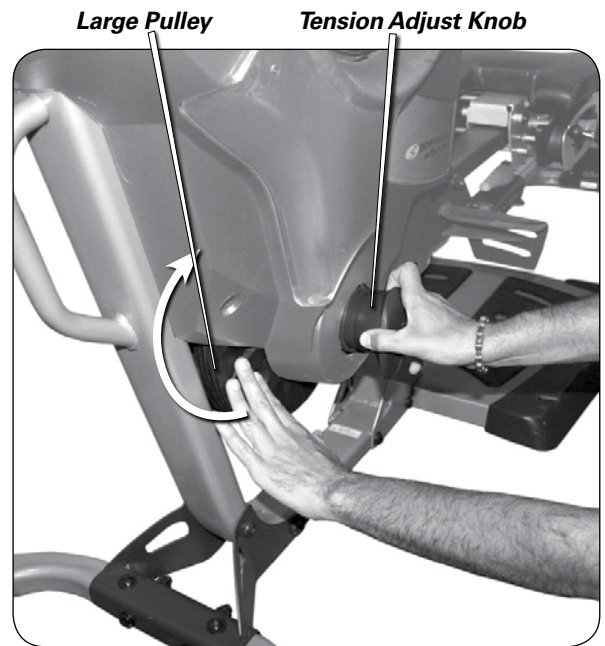
Step 16: Final Check

Please inspect your machine to ensure that all fasteners are tight and everything is properly assembled.

Maintenance Procedures

Adjust Rope Tension

Pull out Tension Adjust Knob and rotate Large Pulley in a clockwise direction until it stops then release the Tension Adjust Knob to lock.



Replace Cam Assembly

1. Remove Top Cover.

1-1. Use a 1/8" allen wrench to remove the four allen bolts that secure the Top Cover.

1-2. Remove Top Cover and set aside.



2. Remove Shroud Clip.

2-1. Remove the Clip securing the shrouds under top inside.



Maintenance Procedures

Replace Cam Assembly (continued)

3. Remove Tension Adjust Knob Cap.

- 3-1. Use a phillips head screwdriver to remove the screw securing Tension Adjust Knob Cap. (Figure A)
- 3-2. Once the Screw is removed, use the screwdriver to gently pry the cap out of the knob. (Figure B)

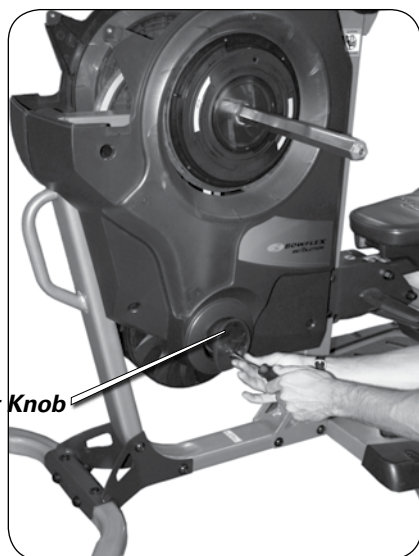


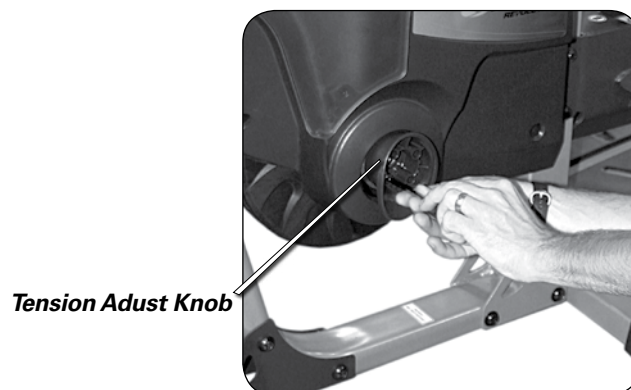
Figure A



Figure B

4. Remove Tension Adjust Knob.

- 4-1. Use a phillips head screwdriver to remove the four screws securing the Tension Adjust Knob.
- 4-2. Remove the Tension Adjust Knob and set aside.



Maintenance Procedures

Replace Cam Assembly (continued)

5. Remove Shroud.

- 5-1. Use a phillips head screwdriver to remove the five screws securing the shroud
- 5-2. Remove the Shroud and set aside.



6. Remove Tension Shaft From Cam Assembly.

- 6-1. Use a 7/32" allen wrench to loosen the eight bolts on the Tension Shaft Holder. (Figure A)
- 6-2. Pull the Tension Shaft through (Figure B) until it clears the Cam Assembly (Figure C) being replaced.

Tension Shaft Holder

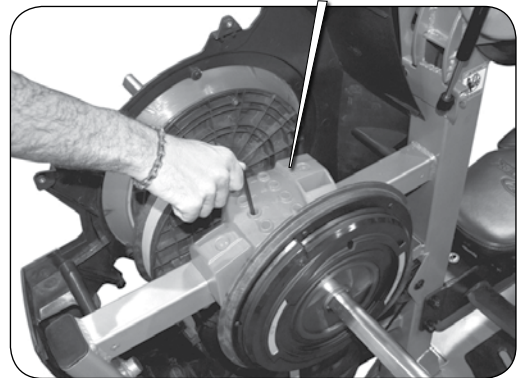


Figure A

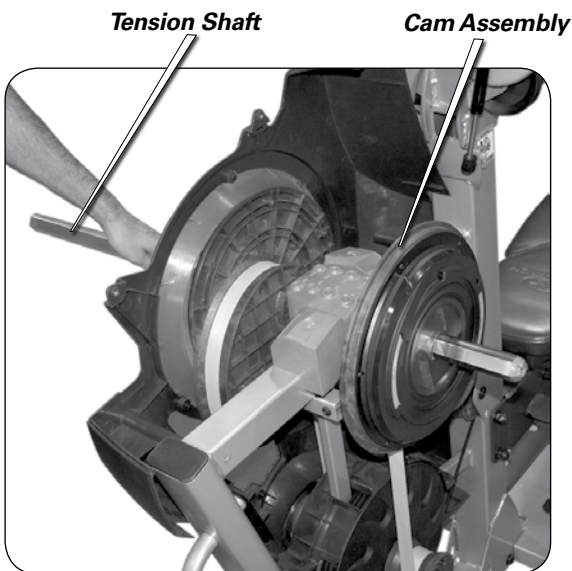


Figure B

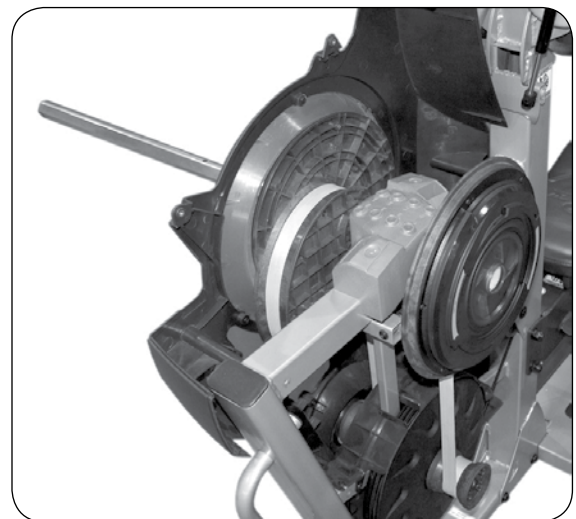


Figure C

Maintenance Procedures

Replace Cam Assembly (continued)

7. Remove Pre-Tension Pack.

7-1. Use a 3/32" allen wrench to remove the six allen bolts from the Pre-Tension Pack. (Figure A)

7-2. Remove the Pre-Tension Pack. (Figure B)

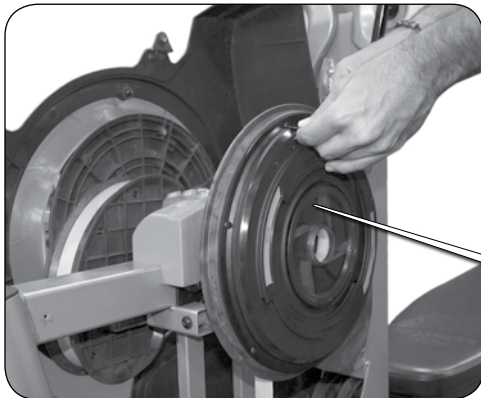


Figure A

Cam Assembly
Pre-Tension Pack

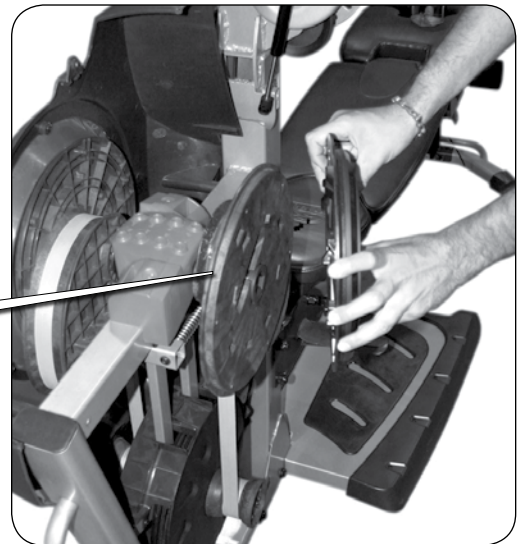


Figure B

8. Remove Lock Collar From Cam.

8-1. Use a flat head screwdriver to pry up the bottom tab on the Lock Collar. (Figure A / Detail A)

8-2. Remove the Lock Collar from Cam. (Figure B)

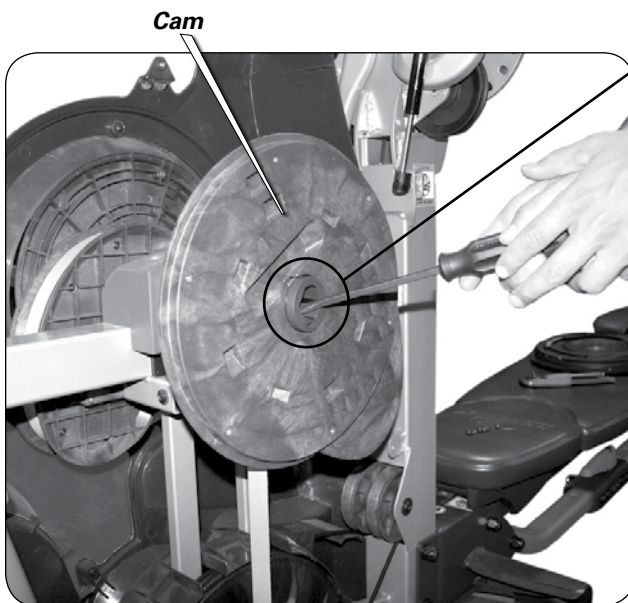
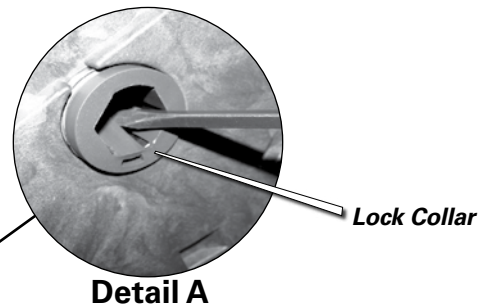


Figure A



Detail A

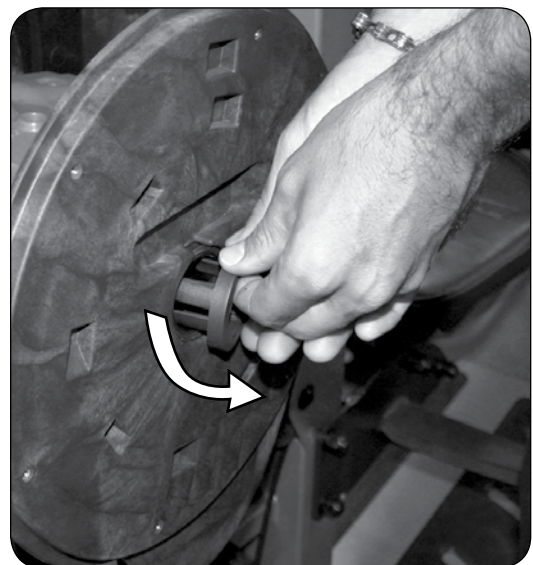


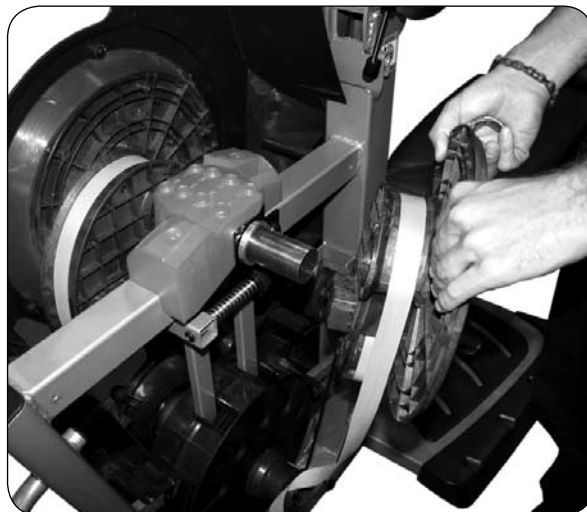
Figure B

Maintenance Procedures

Replace Cam Assembly (continued)

9. Remove Cam.

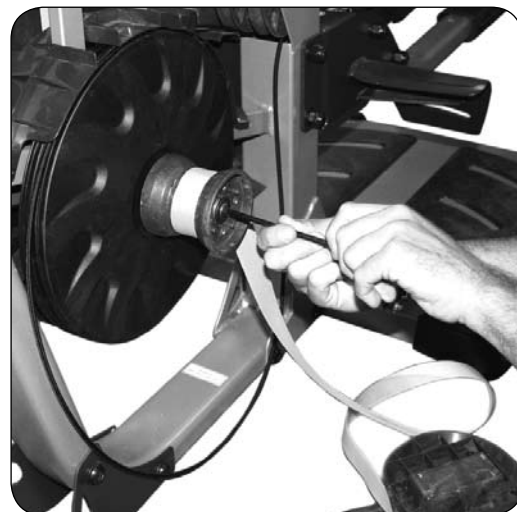
9-1. Remove Cam from Cam Axle.



10. Remove Lower Spool.

10-1. Use a 7/32" allen wrench to remove the bolt securing the Lower Spool.

10-2. Remove the Lower Spool.



Maintenance Procedures

Replace Cam Assembly (continued)

11. Install New Cam Assembly.

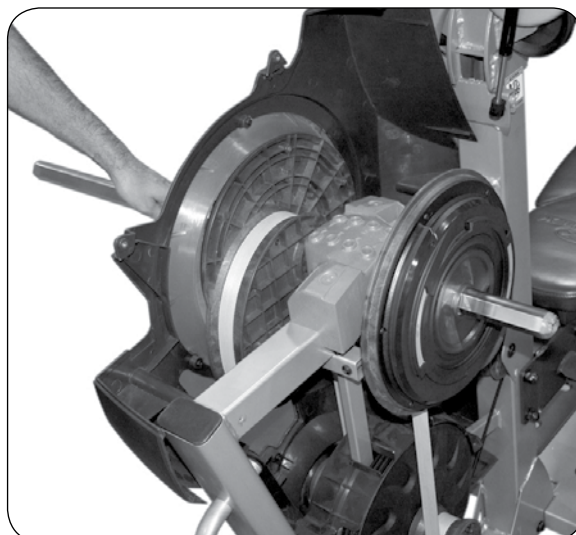
Reverse the disassembly procedure to install the new Cam Assembly with the following notes.

1. When replacing the Lower Spool, make sure to wind the strap counter clockwise. (Figure A)



Figure A

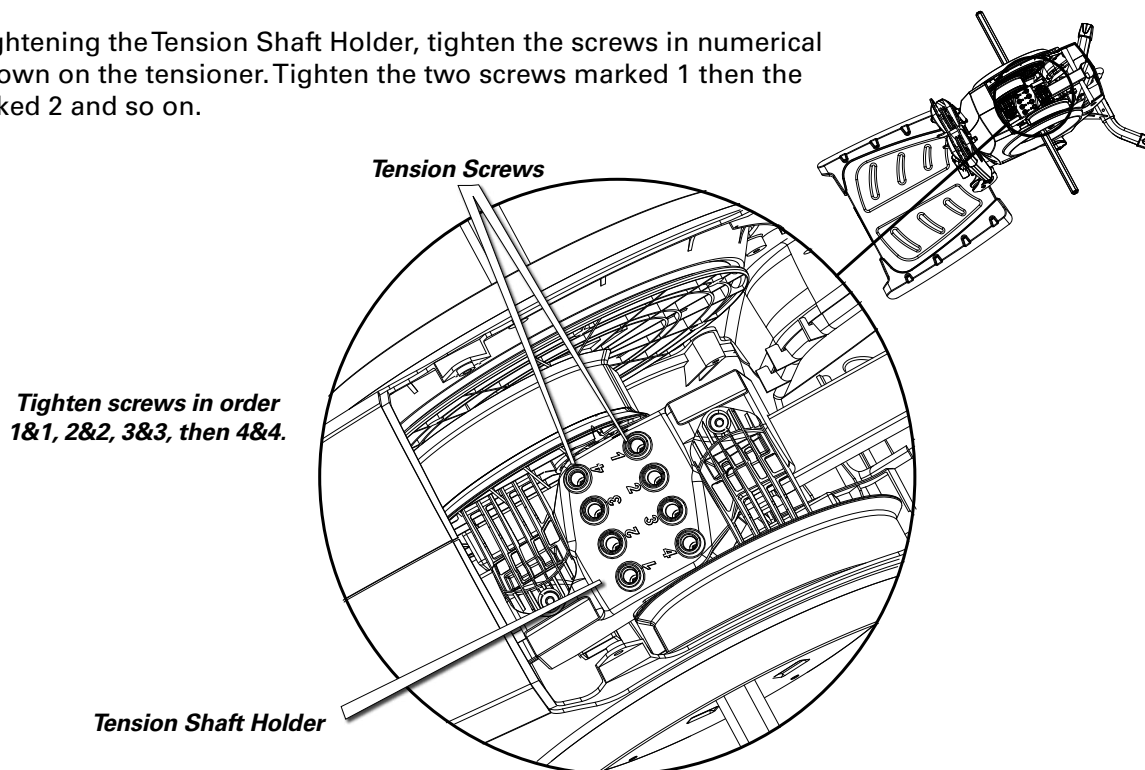
2. When sliding the Tension Shaft back into position, slowly slide the shaft through until it clicks into place. If you do not feel or hear a distinct click, make sure the shaft is centered by measuring the amount of exposed shaft on each side of the main unit.



Maintenance Procedures

Replace Cam Assembly (continued)

2. When tightening the Tension Shaft Holder, tighten the screws in numerical order shown on the tensioner. Tighten the two screws marked 1 then the two marked 2 and so on.



Maintenance Procedures

Replace Rope

1. Follow Steps 1-5 of Replace Cam Assembly to Remove Shroud.

2. Remove Lower Spool

2-1. Use a 7/32" allen wrench to remove the bolt securing the Lower Spool.

2-2. Remove the Spool,(Figure A) unwrap the Strap (Figure B) and hook the Spool behind the frame (Figure C) to keep it out of your way.



Figure A



Figure B

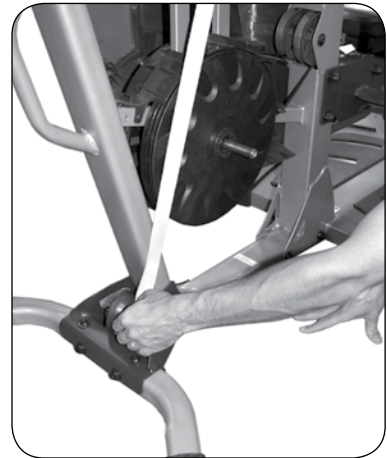


Figure C

3. Remove Large Pulley.

3-1. Slide the Large Pulley off of the axle.

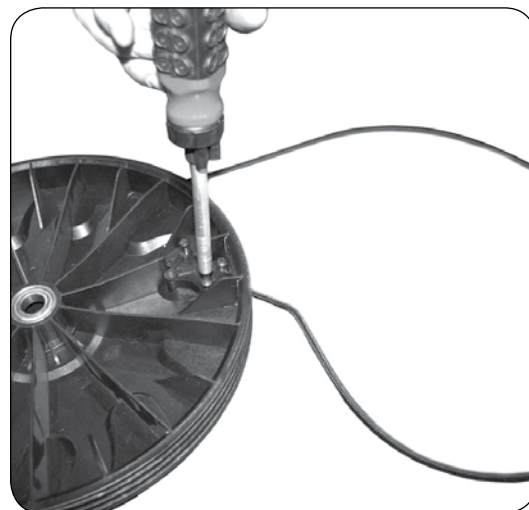


Maintenance Procedures

Replace Rope (continued)

4. Remove Rope From Pulley.

9-1. Remove Cam from Cam Axle.



5. Remove Old Rope.

5-1. Raise the Arm to fully upright position.

5-2. Tie a piece of string (about 6 feet long) to the end of the old Rope. (Figure A)

5-3. Gently pull the old Rope through the Arm and over the Upper Pulley leaving the string threaded through the arm. (Figure B)

Note: Do not pull the string through the arm. Leave enough string exiting at the Lower Pulley to pull the new Rope back through.

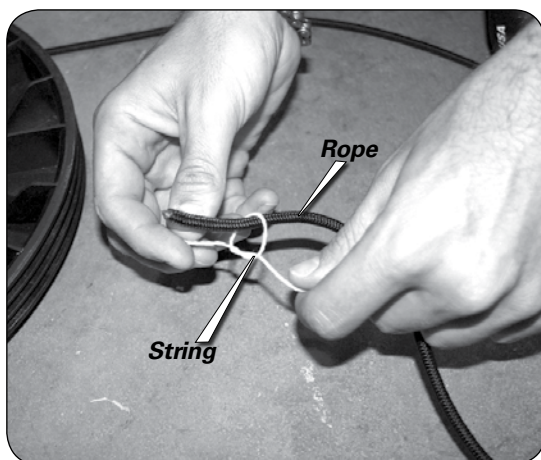


Figure A

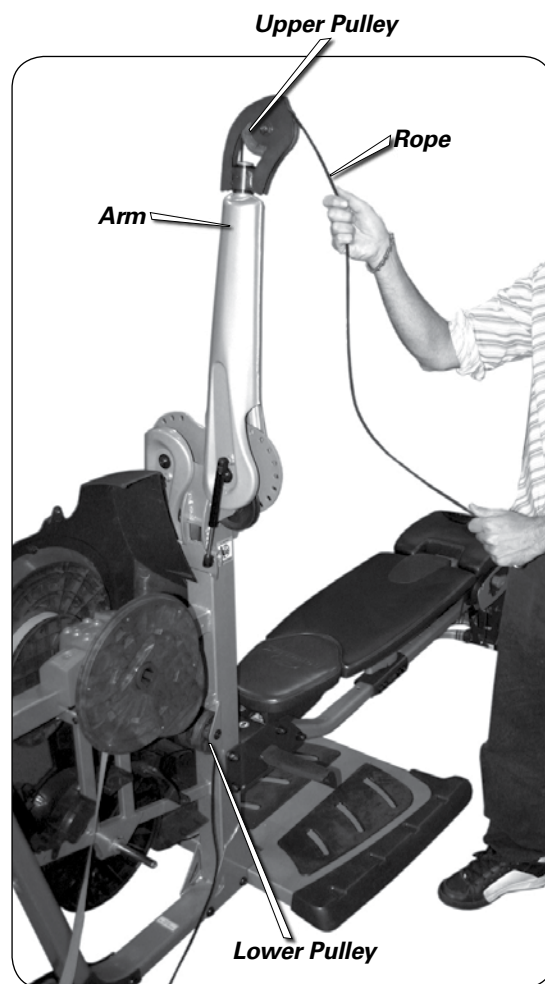


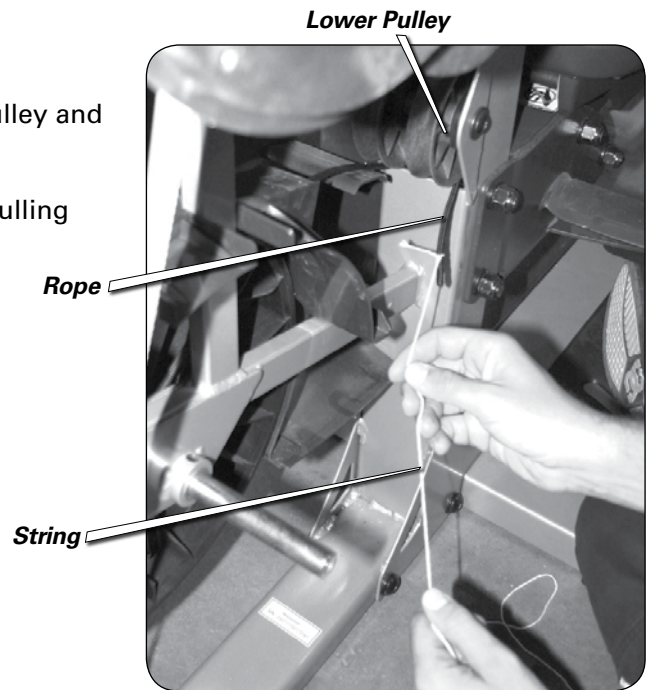
Figure B

Maintenance Procedures

Replace Rope (continued)

6. Route New Rope.

- 6-1. Untie the *old* Rope from the string at the Upper Pulley and tie the string to the *new* Rope.
- 6-2. Thread the new Rope through the Arm by gently pulling the string from the Lower Pulley.



7. Clamp Rope In Large Pulley.

- 7-1. Feed the Rope through the hole in the Large Pulley and clamp in place.

Note: To be sure Rope is securely clamped, leave about 1/4" showing on the inside of the clamp.



1/4" of Rope showing

8. Reverse Steps 3,2, and 1 to reassemble..



©2005 Nautilus Inc. All rights reserved. 16400 S.E. Nautilus Drive, Vancouver, Washington, USA 98683.
Bowflex, Bowflex Revolution, Spiraflex, and the Bowflex and Nautilus logos are either registered trademarks or trademarks of Nautilus, Inc.