



PREVENTIVE MAINTENANCE



TREADMILLS

Housekeeping & Maintenance



Preventive Maintenance - Treadmills

INTRODUCTION

This is a Preventive Maintenance book for Star Trac treadmills. This book is designed to be easy to use, providing instructions on how and when to service and maintain Star Trac treadmills.

Star Trac highly recommends that you read the entire book prior to performing any preventive maintenance. The information on the following pages will enable you to begin easily, quickly and safely.

This is not an Owners or Service Manual. This book is intended for use as a guide to help clean and maintain the referenced product.

If you have any questions or require additional assistance, contact the Star Trac Customer Service department during regular hours of operation.

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PREVENTIVE HOUSEKEEPING and MAINTENANCE

Ref Nr.	Task Description	Models	Activity	Frequency	Time in minutes
1	Clean: Wipe Down	All	Clean	1 per week	2
2	Clean: Under Belt	All	Clean	1 per week	2
3	Vacuum around/ under Treadmill	All	Clean	1 per week	3
4	Check: Power Cord	All	Inspect	1 per week	0.5
5	Check: Running Belt Tracking	All	Inspect	1 per week	0.5 min for inspection, 5 min if adjustment is necessary
6	Inspect: Running Belt- Underside and Deck	All	Inspect	1 per month	2 min for inspection, 45 min if replacement is necessary
7	Inspect: Running Belt - Top	All	Inspect	1 per month	2 min for inspection, 45 min if replacement is necessary
8	Check: Drive Belt - Tension	All	Check	1 per month	2 min for inspection, 45 min if replacement is necessary
9	Check: Running Belt Tension	All	Check	1 per month	2 min for inspection, 10 min if belt has to be retensioned
9-A	Check: Running Belt Tension (Belleville Washer Tensioning System Only)	7500 7600 7700 PTr ETr	Check	1 per month	2 min for inspection, 10 min if belt has to be retensioned
10	Check: Keypad	All	Check	1 per month	2 min for inspection, 30 min if replacement is necessary
11	Clean / Lubricate: Elevation Screws	All	Clean/Lubricate	1 per 6 months	3
12	Vacuum under Shroud	All	Clean	1 per 6 months	3
13	Check: Wire connections	All	Check	1 per 6 months	1
14	Check: Speed Sensor	All	Check	1 per 6 months	1 min for inspection, 5 min for resetting distances
15	Calibrate Motor - Elevation	All	Calibrate	1 per year	5
16	Apply Wax (waxed belt only)	4200 4500 5600 7500	Application	1 per 6 months	10
17	Calibrate weight Scales	7700	Calibrate	1 per year	5
18	Motor Brushes (DC motor only)	5600 4200 4500 7500	Replacement	1 per 3 years	15

Preventive Maintenance Log Book - Monthly Checks

Serial Number:											
Installation Date:											
Ref. Nr	6		7		8		9		10		
Task Description	Inspect: Running Belt Underside and		Inspect: Running Belt Top Surface		Check: Drive Belt Tension		Check: Running Belt Tension		Check: Keypad		
Date Completed and By Whom	Date	By	Date	By	Date	By	Date	By	Date	By	
Year 1	Jan										
	Feb										
	Mar										
	Apr										
	May										
	Jun										
	Jul										
	Aug										
	Sep										
	Oct										
	Nov										
	Dec										
Year 2	Jan										
	Feb										
	Mar										
	Apr										
	May										
	Jun										
	Jul										
	Aug										
	Sep										
	Oct										
	Nov										
	Dec										
Year 3	Jan										
	Feb										
	Mar										
	Apr										
	May										
	Jun										
	Jul										
	Aug										
	Sep										
	Oct										
	Nov										
	Dec										

Preventive Maintenance Log Book - Monthly Checks

Serial Number:											
Installation Date:											
Ref. Nr	6		7		8		9		10		
Task Description	Inspect: Running Belt Underside and		Inspect: Running Belt Top Surface		Check: Drive Belt Tension		Check: Running Belt Tension		Check: Keypad		
Date Completed and By Whom	Date	By	Date	By	Date	By	Date	By	Date	By	
Year 4	Jan										
	Feb										
	Mar										
	Apr										
	May										
	Jun										
	Jul										
	Aug										
	Sep										
	Oct										
	Nov										
	Dec										
Year 5	Jan										
	Feb										
	Mar										
	Apr										
	May										
	Jun										
	Jul										
	Aug										
	Sep										
	Oct										
	Nov										
	Dec										

Preventive Maintenance Log Book - Yearly Checks				
Serial Number:				
Installation Date:				
Ref. Nr	15		17	
Task Description	Calibrate Elevation Motor		Calibrate Weight Scales	
Date Completed and By Whom	Date	By	Date	By
Year 1				
Year 2				
Year 3				
Year 4				
Year 5				

Preventive Maintenance Log Book 3 Years		
Serial Number:		
Installation Date:		
Ref. Nr	18	
Task Description	Replace DC Motor Brushes	
Date Completed and By Whom	Date	By
Year 3		
Year 6		

Ref Nr: 1 (Applies to All Treadmill Models)

WIPE DOWN

Recommended: Weekly
Average Time: 2 minutes

TOOLS

- Spray Bottle
 - Clean Soft Towel
 - Mild Liquid Cleaner
 - Water
-

PREPARATION:

- Dilute Mild Cleaner with Water,
 - 1 part Cleaner to 5 parts Water
-

CAUTION:

USE only Mild Cleaners:

- Formula 409
- Fantastic
- Simple Green

NEVER use Cleaners with:

- Alcohol
 - Ammonia
 - Solvents
-

APPLICATION:



Spray liquid on towel...



...and use towel to wipe



NEVER spray directly on surfaces

Ref Nr: 1 (Applies to All Treadmill Models)

Display

Heart Rate Grips

Handrails

Shroud

Side Bed Covers



Deck and underneath the edge of Belt:



Ref Nr: 2 (Applies to All Treadmill Models)

CLEANING (Belt & Deck)

Recommended: Weekly
Average Time: 2 minutes

TOOLS

- Clean Towel
 - Flat Ruler / Flat Stick / Flat piece of Cardboard (shown)
-

CLEANING STEPS

Step 1: Stop Treadmill

Step 2: Push towel between belt and deck all the way to the other side of the belt.



Step 3: Pull Towel towards the Head Roller and then to the Tail Roller



Step 4: Remove towel

Step 5: Move Running Belt until the second logo appears

Step 6: Repeat cleaning procedure in step 1.

Ref Nr: 3 (Applies to All Treadmill Models)

Vacuum Underneath and Around Treadmill

Recommended: Weekly
Average Time: 3 minutes

CLEANING STEPS

Step 1: Elevate Treadmill to the highest position

Step 2: Use Vacuum Cleaner with attachments; reach underneath the Treadmill



Vacuum on all sides



Step 3: Return Treadmill to bottom position

Ref Nr: 4 (Applies to All Treadmill Models)

POWERCORD - SAFETY

Recommended: Weekly
Average Time: 1 minutes for inspection

INSPECT:

Power Cord Arrangement:



NEVER underneath treadmill



Away from treadmill

INSPECT:

For Damage:



Nicks, Cuts, Breaks, etc.



Kinks, Sharp Bends

Replace Power Cord!

Ref Nr: 5 (Applies to All Treadmill Models)

BELT ALIGNMENT & ADJUSTMENT

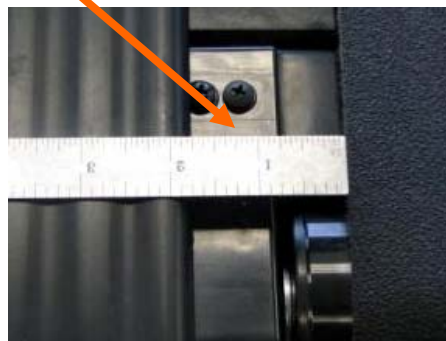
Recommended:	Weekly
Mandatory:	Monthly
Average Time:	Less than 30 seconds for inspection 5 minutes, if adjustment is required

TOOLS

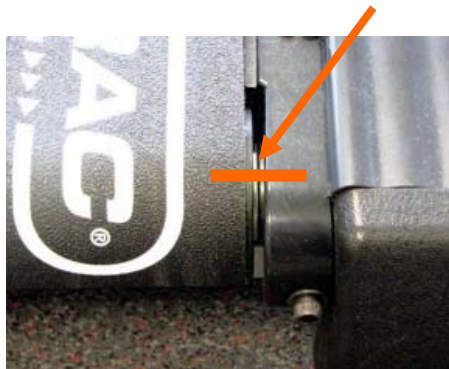
- 1/4" Allen wrench
-

INSPECT: Alignment of Running Belt

Distance between Edge of Running Belt and Side Cover should be the same on both sides.



If the difference in Distance between Right and Left Hand Side is more than 0.75" (20 mm), alignment is necessary.



Ref Nr: 5 (Applies to All Treadmill Models)

Alignment:

Start Treadmill, set at 3.0 MPH (5.0 km/h)



<p>If belt tracks more to the left side</p> <p>←</p> <p>Turn right tension screw counterclockwise a ¼ turn</p> <p>↺</p> <p>↺</p> <p>If belt still tracks to the left side, turn left tension screw clockwise ¼ turn</p>	<p>If belt tracks more to the right side</p> <p>→</p> <p>Turn right tension screw clockwise a ¼ turn</p> <p>↻</p> <p>↻</p> <p>If belt still tracks to the right side, turn left tension screw counterclockwise ¼ turn</p>
--	--

Repeat until the running belt tracks in the center.

After belt is tracking correctly, increase speed to 8.0 MPH (12.0 km/h) for 2 to 3 minutes to ensure belt stays centered

Ref Nr: 6 (Applies to All Treadmill Models)

BELT, UNDERSIDE – DECK, SURFACE

Recommended: Monthly
Average Time: 2 minutes

INSPECT

Caution: Deck surface might be hot if treadmill was recently in use.

Inspect the back of the running belt by using your hand to feel for rips, tears, embedded objects, hanging fibers or other defects.



Inspect the top surface of the deck by using your hand to feel for embedded objects, cracks, debris or other surface defects that could reduce belt life and performance. If such defects are found, flip the deck.



Ref Nr: 7 (Applies to All Treadmill Models)

BELT, TOP SIDE

Recommended: Monthly
Average Time: 2 minutes for inspection
45 minutes, if belt has to be replaced

INSPECT

1. Inspect the top surface of the running belt for cuts, embedded foreign objects.



2. Inspect both Logos, replace the running belt if the logo is more than 75% worn-off.



New



Worn, ready to be replaced

3. Inspect Running Belt, if folded-over, replace



4. Inspect Top Surface of Running Belt, replace if **worn through the top layer**.
Very rare, surface might be shiny but not worn through. (See picture)



5. Inspect Running Belt,

Replace if excessively wavy in the center or at the sides.

Replace if damaged on the sides (as shown below)



Ref Nr: 8 (Applies to All Treadmill Models)

DRIVE BELT

Recommended:	Monthly
Average Time:	2 minutes for inspection 30 minutes, if belt has to be replaced

INSPECT

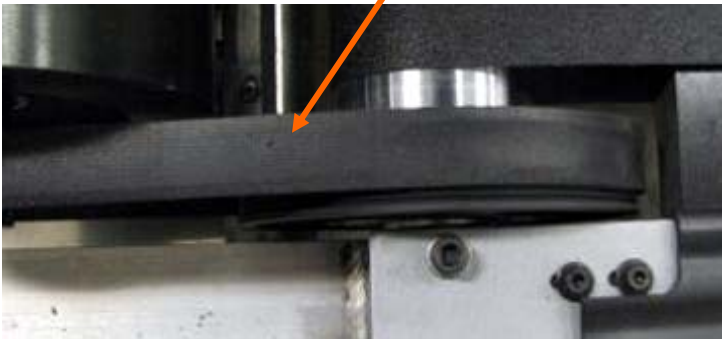
Step 1: Take off Shroud

1. Check Belt tension by twisting the belt.



If belt can be easily turned more than 90 degrees, belt has to be tensioned

2. Check drive belt alignment.



The belt should be in the center of both the head roller pulley and the motor drive pulley (there should be no signs that the belt has jumped a groove in either of the pulleys). If necessary, loosen and readjust.

3. Check the drive belt for signs of excessive wear such as cracks, missing pieces or frayed edges.
Replace drive belt if necessary.

Ref Nr: 9 (Applies to All Treadmill Models)

TENSION – RUNNING BELT

Recommended:	Monthly
Mandatory:	Bi-Annually (Every 6 months)
Average Time:	2 minutes for inspection 10 minutes, if belt has to be tensioned

TOOLS

- #2 Phillips screwdriver (to remove shroud)
 - Add'l tools may be required for retensioning (see individual procedures)
-

PREPARATION

- Start treadmill in “Quick Start” - Set to 0.5 MPH (1.0 km/h)
-

Check Running Belt Tension

Person checking should weigh at least 160 lbs (70 kg).



While walking on the running belt, attempt to stop the running belt by stepping hard with one foot into the oncoming belt, just in front of the lower shroud. The running belt should not slip. If the running belt slips, take off shroud and check for:

Running Belt slipping on the Head Roller

or

Drive Belt slipping on the Head Roller Pulley.

If Running Belt is slipping, tighten Belt per Procedure: “How to Tighten a Running Belt”

If Drive Belt is slipping, tighten Belt per Procedure: “How to Tighten a Drive Belt”.

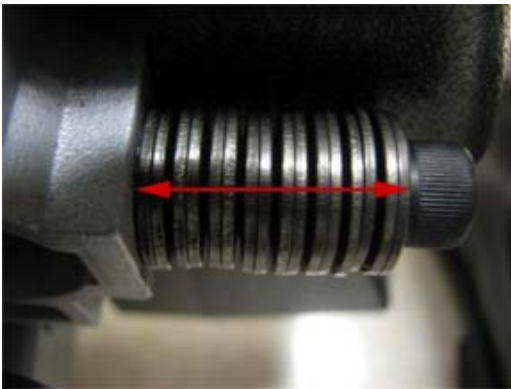
Ref Nr: 9A (Applies to All Treadmill Models With Belleville Washer Tensioning System)

TENSION – RUNNING BELT

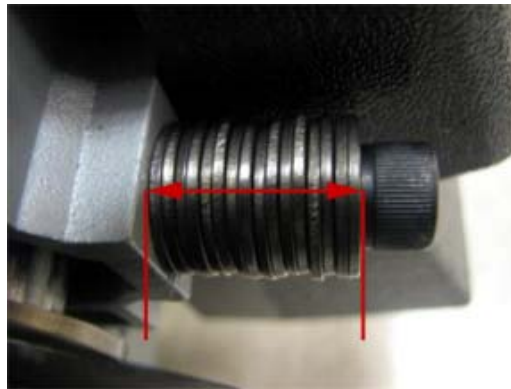
Recommended: Monthly
Mandatory: Bi-Annually (Every 6 months)
Average Time: 2 minutes for inspection
10 minutes, if belt has to be tensioned

TOOLS

- #2 Phillips screwdriver (to remove shroud)
 - ¼" Allen wrench
 - Caliper or ruler with 1/32" graduation or ruler with 1 mm graduation
-



No Compression



Correct Compression
(measured from the base to
the last Belleville washer)

Correct Stack Height:

Measured from Base to the last Belleville Washer

Range when adjusting:

Inch Dimensions: 7/8" (+ 0"; - 1/32") (.875 to .843")
Metric Dimensions: 22 mm (+ 0 mm; - 1 mm)

Range during operation: do not touch if Stack is within these dimensions

Inch Dimensions: 7/8" (+ / - 1/32") (.875 to .900")
Metric Dimensions: 22 mm (+ / - 1 mm)

Ref Nr: 10 (Applies to All Treadmill Models)

KEYBOARD CHECK

Recommended: Monthly
Average Time: 2 minutes for inspection

PREPARATION

- Start treadmill in "Quick Start" - Set to 0.5 MPH (1.0 km/h)
-

Check all keys on the keypad for functionality



Replace keyboard if any keys are **NONFUNCTIONAL**

Ref Nr: 11 (Applies to All Treadmill Models)

ELEVATION SCREWS - LUBRICATION

Recommended: Bi-Annually (Every 6 months)
Average Time: 3 minutes

TOOLS

- #2 Phillips screwdriver (to remove shroud)
 - Clean rag
 - Lubricant (Silicone or Teflon based – **Do not use WD40**)
-

PREPARATION

- Remove front shroud
-

Clean and Lubricate

Step 1: Clean Screw Thread and lubricate with Silicone or Teflon



Step 2: Elevate Treadmill to the high position and lower it back down.

Step 3: Replace Shroud.

Ref Nr: 12 (Applies to All Treadmill Models)

VACUUM UNDER SHROUD

Recommended: Bi-Annually (Every 6 months)

Average Time: 3 minutes

PREPARATION

- Vacuum cleaner with attachments
 - Disconnect treadmill power cord from the wall outlet
 - Remove the front shroud completely
-

Vacuum:

- Vacuum areas usually covered by the front shroud
- Reach into all nooks and crannies with the vacuum cleaner

Keep it clean



Never let it come to this!



*Actual customer unit



*Actual customer unit



*Actual customer unit

- Reconnect any wires knocked loose by accident
- Reinstall shroud
- Reconnect treadmill power

Ref Nr: 13 (Applies to All Treadmill Models)

WIRE CONNECTIONS

Recommended: Bi-Annually (Every 6 months)

Average Time: 5 minutes

PREPARATION

- Disconnect treadmill power cord from the wall outlet
 - Remove the front shroud completely
-

Check Connections:

Check all cable connections under the front shroud to make sure they are fully engaged and positively connected.

Connections on the MCB (Motor Control Board)

Connections on the FCB (Fan Control Board).



Replace shroud and turn treadmill back on again.

Ref Nr: 14 (Applies to All Treadmill Models)

SPEED SENSOR

Recommended: Bi-Annually (Every 6 months)

Average Time: 3 minutes

TOOLS

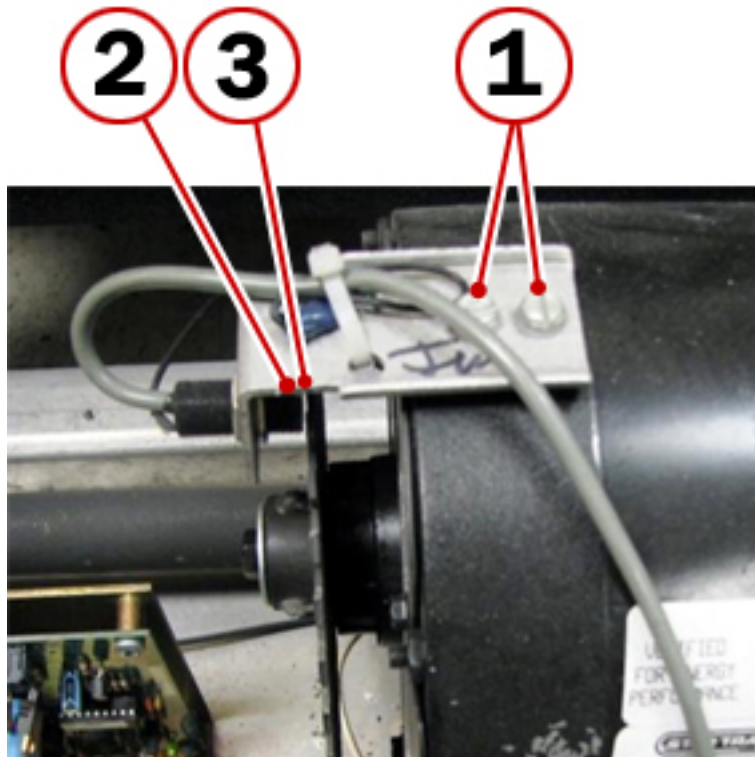
- #2 Phillips screwdriver (to remove shroud)
 - #2 flat head screwdriver
-

PREPARATION

- Disconnect treadmill power cord from the wall outlet
 - Remove front shroud
-

Speed Sensor Check:

1. Check that the speed sensor bracket on the top of the motor is securely fastened.
2. Check that the speed sensor is clean, free of obstruction.
3. Check the gap between Sensor and RPM wheel (1/32" - 1/16") (1 to 2 mm).



Replace shroud and turn treadmill back on again.

Ref Nr: 15 (Applies to All Treadmill Models)

CALIBRATION – MOTOR - ELEVATION

Recommended: Should not be needed

It should not be necessary to calibrate the elevation system, unless you replace an elevation component. In which case you should refer to the elevation component part replacement procedure or contact Star Trac Customer Support.

Ref Nr: 16 (Applies to Treadmill Models 4200, 4500, 5600, 7500)

WAX RUNNING BELT & DECK

Recommended: Bi-Annually (Every 6 months)

Average Time: 10 minutes

TOOLS & MATERIALS

- One bottle or bag of wax powder
 - One clean towel
 - One paint stick or ruler
 - Diluted* all-purpose cleaner such as Simple Green or 409
- *Dilute cleaning solution with 50% cleaner and 50% water
-

Step 1:

WARM UP BELT:

Before applying wax, the belt should be warmed up. Run belt for several minutes, or apply wax within 5 minutes after use. After applying wax, it will need to be walked in for maximum absorption.

**If warming up the belt with no user, do not leave treadmill unattended.*

Step 2:

POWER OFF AND UNPLUG THE TREADMILL

Step 3:

CLEAN DECK & BELT:

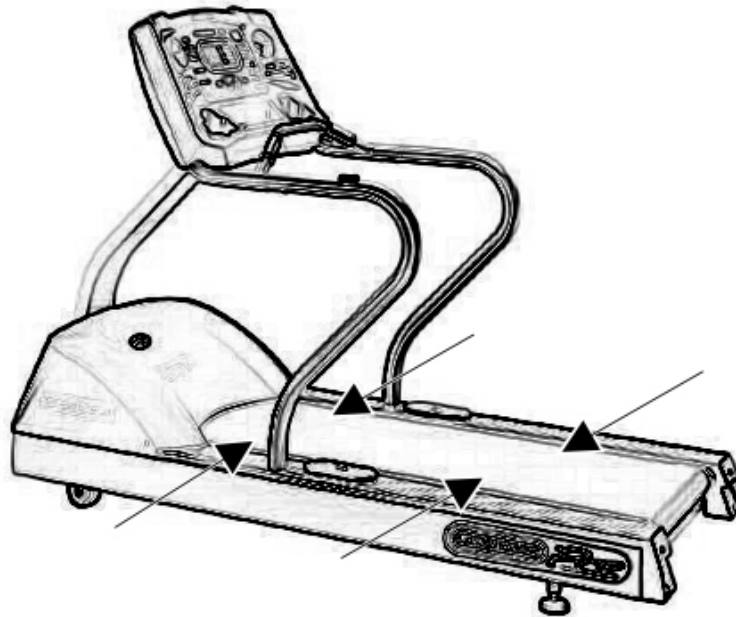
Using the stick or ruler, slide a towel under the middle of the belt, from one side to the other.

Hold the edges of the towel and pull towards the back of the unit, then towards the front, then all the way back again. Slide the belt to wipe completely.

LIFT BELT: Lift the left side (facing the display) of the belt, about 12 inches back from the front cover (see figure). Hold the belt up to elevate it from the deck.

**It is not necessary to loosen the belt from the rear adjustment.*

WAX RUNNING BELT & DECK



Step 4:

SPREAD WAX:

Bottle: Flip up the nozzle on the cap of the wax bottle. Point the nozzle at the deck. Be sure that the bottle is tilted at a downward angle. Give the bottle 2 squeezes while aiming the wax under the belt on top of the deck. Gently shake the bottle between each squeeze.

Bag: Open bag enough to get 1 teaspoon of wax out. You will not need a heaping spoonful, rather just enough to fill the spoon, a little over level. Spread the wax under the belt, gently blowing it to avoid piles or clumps.

Repeat Steps: Repeat steps 2 & 3, about 18 inches from the end of the deck.

Repeat Steps: Repeat steps 2, 3 & 4, on the right side of the unit.

Step 5:

WALK: Plug in the unit and turn it on. Start the treadmill at 1 mph and walk on the all sections of the belt and deck for a minute to ensure the wax has been evenly distributed. Then proceed into a normal workout to allow the wax to work into the belt properly.

Ref Nr: 17 (Applies to Treadmill Models 4200, 4500, 5600, 7500)

WAX RUNNING BELT & DECK

Recommended: Once a year

Average Time: 5 minutes

TOOLS & MATERIALS

- None required
-

CALIBRATION – SCALE

7700 MODEL only

Steps:

Select: "Maintenance Mode"

Select: "Calibrate Scale"

Press: "Start"

Press "1"

Put known weight on scale

Input weight

Press: "OK"

Press: "OK"

Press "4"

Check with weight

Check without weight

Press: "Stop"

Calibration is finished.

Ref Nr: 18 (Applies to All Treadmill Models)

REPLACE MOTOR BRUSHES (DC MODELS ONLY)













Mandatory: Every 3 years

TOOLS

- #2 Phillips screwdriver (to remove shroud)
- #2 flat head screwdriver

PREPARATION

- Disconnect treadmill power cord from the wall outlet
- Remove front shroud

Step	4200/7500 Models		Step	5X00 & 6X Models	
1.		Unscrew the two screws and remove the cover	1.		Using flat head screw driver carefully unlock the retaining pin
2.		Push down on the retaining clip	2.		Gently remove the pin and the cover
3.		Tilt down the retaining clip while pushing down the clip	3.		The brush should be on the side
4.		Carefully remove the retaining spring	4.		Carefully push down on the retaining clip spring, tilt and remove it
5.		Unscrew the wire and carefully pull out the motor brush	5.		Unscrew the wire and pull out the motor brush
6.		There should be two brushes, one on each side. Replace it in the reverse order	6.		There should be two brushes, one on each side. Replace it in the reverse order



PREVENTIVE MAINTENANCE

TREADMILLS