



BOWFLEX
TreadClimber.



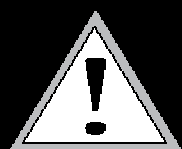
Service Manual

TC1000 • TC3000 • TC5000

P/N: 001-6890 (1/20/2006)

Important—Please Read

If you are a consumer and require technical support to resolve a problem with your Bowflex® TreadClimber®, Model TC1000, TC3000 or TC5000, please call Nautilus Customer Service at 800-864-1270 (USA) or +41-26-460-77-77 (International).



WARNING

DANGEROUS VOLTAGES ARE PRESENT INSIDE THE BOWFLEX® TREADCLIMBER® FITNESS MACHINE. SERVICING BY OTHER THAN AUTHORIZED NAUTILUS SERVICE PERSONNEL MAY RESULT IN ELECTRICAL SHOCK OR OTHER INJURY.

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IMPORTANT SAFETY PRECAUTIONS

SAVE THESE INSTRUCTIONS

The following definitions apply to the word "Warning" found throughout this manual:

 WARNING	<i>Used to call attention to POTENTIAL hazards that could result in personal injury or loss of life.</i>
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 WARNING
Failure to follow these precautions can cause damage to the Bowflex® TreadClimber® fitness machine, serious injury to users and bystanders, and can also compromise the effectiveness of your exercise program.

READ ALL INSTRUCTIONS BEFORE USING THE MACHINE.

1. Read, understand and carefully follow all warnings, instructions, and procedures on the Bowflex® TreadClimber® fitness machine, and in the Assembly Guide and Owner's Manual before using the TreadClimber® fitness machine. Pay particular attention to and test the Emergency Stop Procedures on Page 5 before use.
2. **CONSULT YOUR PHYSICIAN BEFORE STARTING ANY EXERCISE PROGRAM.** Only your physician can determine the exercise program that is appropriate for your particular age and condition. If you have not been exercising, are pregnant, have a heart condition, or any physical limitation, failure to consult your physician before engaging in physical exercise, such as using the Bowflex® TreadClimber® fitness machine, could result in serious injury or death. If while using the Bowflex® TreadClimber® fitness machine you have any pain or tightness in your chest, an irregular heart beat, shortness of breath, feel faint, light-headed or dizzy, have any pain or discomfort, STOP and consult your physician immediately.
3. Parents and others in charge of children should be aware that children, because of their natural play instinct and fondness for experimenting, may be tempted towards situations and behavior for which the equipment is not intended, with resulting damage to the equipment and injury to the children or others. Children's access to the equipment should therefore be controlled, and they should be instructed about the potential for personal injury and damage if they play with the equipment.
4. Inspect the TreadClimber® fitness machine for damaged, broken, worn, or loose components and then correct, replace, or tighten prior to use. The fitness machine can only be safely used when it is regularly inspected for damage or wear. Inoperable components should be replaced immediately or the equipment taken out of use until it is repaired.
5. Be careful when mounting or dismounting the TreadClimber® fitness machine. Do not stand on the Plastic Frame Covers or Drive Covers but always step directly onto the Side Foot Support Platforms. Never step onto the treadles at a high belt speed. Start your workout slowly and gradually increase to your desired workout speed.
6. The maximum speed of the TreadClimber® fitness machine is 4.5 MPH (7.2 KPH). Do not attempt to run on the TreadClimber® fitness machine, but keep your highest speed at a brisk walk.
7. Do not wear any loose or dangling clothing, or jewelry while using the Bowflex® TreadClimber® fitness machine. Always keep your hands, feet, clothing, etc. clear from beneath the treadles and from all moving parts. Never use your TreadClimber® fitness machine with the Plastic Drive Covers or Frame Covers removed.
8. Always wear rubber-soled athletic shoes on the TreadClimber® fitness machine. Never use the TreadClimber® fitness machine barefooted or wearing only socks.
9. Keep your foot centered on each treadle—do not allow your feet to cross in front of your body as you increase speeds.
10. Keep your hands on the support handlebars and stand as close to the front of the fitness machine as is comfortable in order to remain in balance on the treadles.
11. Never convert from or into treadmill mode while the belts are in motion, or the machine is powered up. Turn off power, unplug cord from wall outlet, line up the treadles, and then lock or release the treadle locking lever.

IMPORTANT SAFETY PRECAUTIONS

- 12.** Never adjust the Hydraulic Cylinder Workout Settings while belts are in motion. Step completely off of the TreadClimber® fitness machine, stop the belts, and turn the power off prior to adjusting.
- 13.** Maximum user weight for the Bowflex® TreadClimber® fitness machine is 300 pounds (136 kgs). For your safety, do not use or allow others to use the Bowflex® TreadClimber® fitness machine if they weigh in excess of 300 pounds (136 kgs).
- 14.** Make certain that observers stand clear of the Bowflex® TreadClimber® fitness machine when it is in use. Extra care must be taken when disabled persons or pets are nearby.
- 15.** Never allow children to use the Bowflex® TreadClimber® fitness machine unsupervised. To do so could result in injury. Before children are allowed to use the equipment, their mental and physical development should be taken into account through consultation with their doctor, who must approve any exercise program before a child attempts it. Children should be controlled and instructed on the correct use of the equipment.
- 16.** This equipment is under no circumstance suitable as a children's toy.
- 17.** For safety and security, when the TreadClimber® fitness machine is not in use, always lock the treadles and remove the Safety Key.
- 18.** Locate the TreadClimber® fitness machine on a clean, hard, level surface, free from debris, or other objects that may hamper your ability to move freely. Always use a rubber mat beneath the TreadClimber® fitness machine if used on a carpeted area, to ground it, to prevent static electricity discharge and to protect your flooring. Allow at least 19 inches (0.5 meters) on each side of the machine and 79 inches (2 meters) in the rear of the machine for dismount.
- 19.** Do not use your TreadClimber® fitness machine outdoors, on dirt floors, in a carpeted area or in any damp or wet location.
- 20.** Keep the surface of the TreadClimber® fitness machine dry and free from dust or moisture.
- 21.** Use only parts, attachments or accessories that are provided with the TreadClimber® fitness machine.
- 22.** Always connect the power cord to a circuit capable of handling 10 amperes with no other loads. Keep all cords away from heated surfaces.
- 23.** Always unplug the power cord from the fitness machine and wall outlet before removing or installing parts to avoid the risk of electrocution, shock or mechanical injury.
- 24.** Position the power cord alongside the Bowflex® TreadClimber® fitness machine, out of your way when you dismount the machine. Take care to avoid stepping on the power plug. Check cord and plug placement before beginning your workout.
- 25.** Always be gentle when plugging in and unplugging the power cord from the machine base.
- 26.** Never use the power cord if it has a damaged cord or plug, has been immersed in water, or is not working properly. Contact a TreadClimber® Representative to arrange for replacement of a damaged cord.
- 27.** Never drop or insert any object into any opening on the machine.
- 28.** Do not operate where aerosol (spray) products are being used.
- 29.** Do NOT attempt to move the TreadClimber® fitness machine without help, or from the rear of the unit. Doing so could cause injury to you or damage the machine.
- 30.** The TreadClimber® fitness machine is intended for individual consumer use only, and is not meant for use by institutions.
- 31.** The warning labels affixed to the TreadClimber® fitness machine contain important information about your safety. Always read and follow the Warning and Safety labels. Do not remove these labels. If at any time the warning labels become loose, unreadable or dislodged, replacements are available by calling a Nautilus Representative.
- 32.** Keep hands away from the Walking Belt and Deck unless specifically servicing the TreadClimber® fitness machine. Hands and fingers may become caught in the moving belt or between the treadles.

Throughout this manual, all references to the left or right side, and to the front or back, are made as if you were on the TreadClimber® fitness machine, ready to exercise. For example, the power cord is plugged into the incoming power plug at the back of the base.

The dimensions and general specifications for the Bowflex® TreadClimber® exercise machine are as follows:

Physical Dimensions

Length	46 inches (117 cm)
Width	28.5 inches (72.5 cm)
Height	55.25 inches (140.5 cm)
Weight	185 pounds (84 kg)
Shipping Weight	220 pounds (100 kg)

System Capacities

Maximum Weight Capacity	300 lbs (136 kgs)
Speed	
TC1000	0.5 to 3.8 MPH (0.8 to 6.1 KPH)
TC3000 and TC5000	0.7 to 4.0 MPH (1.1 to 6.4 KPH)
Workout Resistance Levels	1 to 12
Warranty Length	See the Warranty section for full information per machine type

Component Specifications

Belt	7.75 in x 38.5 in (19.5 cm x 98 cm)
Motor	0.5 hp continuous duty
Treadmill Incline	10% Grade
Frame	Powder-coated steel
Operational Voltage	95 to 130 VAC 50 - 60 Hz
Operational Current	10A Max
Breaker	12A

Always use a 15A circuit with no loads. A short 14 gauge, 3 wire extension cord is permissible.

Regulatory Approvals



Patent Information

U.S. and International Patents Pending



TC1000



TC3000



TC5000

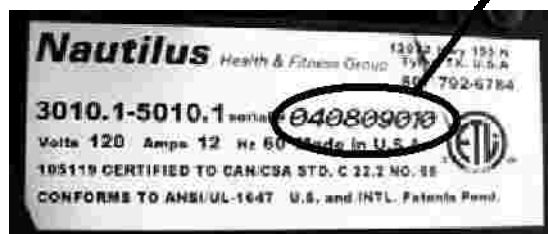
CONTACTING CUSTOMER SERVICE

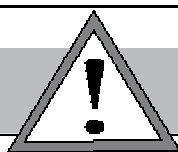
Have the Serial Number Handy.

When contacting customer service to resolve an issue with a particular unit, have the serial number handy. The console, base, and treadle assembly each have their own serial number label. Look on the underside of the console, or on the base next to the treadle locking lever, or on the treadle assembly below the rear roller.

year
produced month
produced day
produced unit number on
day of production

040809010





ATTENTION

The Bowflex® TreadClimber® machine's safety and integrity can only be maintained when it is regularly examined for damage and immediately repaired.

It is the sole responsibility of the owner to ensure that regular maintenance is performed. Worn or damaged components still under warranty must be replaced immediately and the TreadClimber® machine shall remain unused until the required repair is made. Only manufacturer-supplied or approved components shall be used to maintain and repair the TreadClimber® machine.

ALWAYS UNPLUG YOUR TREADCLIMBER MACHINE FROM THE OUTLET BEFORE CLEANING OR SERVICING THE UNIT.

Helpful Hints

Read all maintenance instructions thoroughly before beginning work. In some cases, an assistant is required to perform the necessary tasks. All references to the right or left side, and to the front or back are made as if you were on the TreadClimber® machine ready to exercise.

Initial Service

Upon receiving your TreadClimber® machine, use a soft, clean towel to wipe off the dust that may have accumulated during shipping. Your new machine will require minor assembly. Refer to the Assembly Guide on Page 8 for details.

Accessories

For best performance, we recommend your TreadClimber® machine be placed on a rubber machine (treadmill) mat. Along with reducing noise, a rubber mat will help keep dust and debris away from your TreadClimber® machine's motor and belts, and will reduce static electricity, which could otherwise cause a sudden charge to the TreadClimber® machine's electronic components.

The Bowflex® TreadClimber® Machine Mat is a professional-quality machine mat designed specifically to fit under your Bowflex® TreadClimber® fitness machine and provide added stability. In addition to protecting your floors from scratches and perspiration, the machine mat reduces your TreadClimber® motor's exposure to dust and debris. And it gives your workout area a clean, finished look.

For more information on this accessory and other Bowflex products available from Nautilus, Inc. check out: www.nautilus.com or www.treadclimber.com.

Cleaning

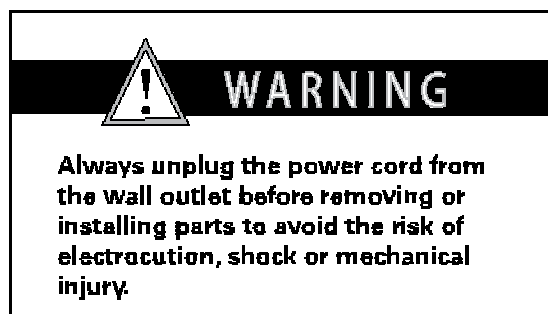
General cleaning of the TreadClimber® machine will prolong the life of your machine and improve performance.

Keep the unit clean by dusting regularly. Be sure to dust the exposed part of the deck on either side of the walking belts and also the side rails. Clean the top of the belt with a damp, soapy cloth and wipe carefully and thoroughly with a dry cloth. Be careful to keep liquid away from inside the base frame and beneath the belts.

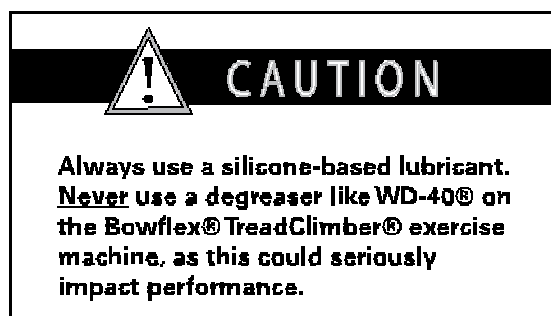
Walking Belt and Deck Lubrication

The TreadClimber® machine is equipped with a pre-lubricated, low maintenance deck and belt system. Belt friction may affect the function and life of the TreadClimber® machine. For the best results from your TreadClimber® machine, lubricate the treadles periodically with a silicone lubricant, using the following instructions:

1. Unplug the TreadClimber® machine completely from the wall outlet, and remove the power cord from the incoming power plug.



2. While the TreadClimber® machine's treadle surfaces are still warm (not hot), apply a very thin layer of silicone lubricant directly onto the treadle beneath each belt—gently lift each side of the belt and apply a few drops of the lubricant.



3. Plug the TreadClimber® machine back into the machine base and then into wall outlet.
4. Stand to one side of your TreadClimber® machine on the rubber mat.
5. Turn on your TreadClimber® machine, and start the belts at the slowest speed. Let the belts run for approximately 15 seconds.
6. Turn off your TreadClimber® machine.

7. Take care to wipe up any excess lubricant from the treadles and your rubber floor mat. We also recommend a periodic inspection of the treadle surfaces under the belts. If the decks appear worn, contact a TreadClimber® Representative at 1-800-NAUTILUS (1-800-628-8458).

NOTE: To reduce the possibility of slipping, be sure the treadle area is free from grease or oil. Wipe off any excess oil from the machine surfaces.

Use the following timetable as a guide to lubricate the decks:

- Light user (fewer than 3 hours/week): annually
- Medium user (3-5 hours/week): every 6 months
- Heavy user (more than 5 hours/week): every three months

We recommend that you use the following:

- Lube-N-Walk® Treadmill Lubrication Kit, available from JAD Fitness, Inc. (800-877-3486 or www.jadfitness.com) or your local specialty fitness dealer.

- 8300 Silicone Spray, available at most Hardware and Auto Parts stores.

Inspecting

1. Visually inspect the TreadClimber® machine every time you use it for wear, damage, or loose parts.
2. Inspect the frame for any rust, bubbling, or paint chips during the weekly cleaning. The salt in perspiration can damage the unpainted surfaces.
3. Inspect the belts for excessive wear during lubrication. Adjust the belt tension if necessary.

Care of your TreadClimber® Exercise Machine

Determining Hours Used (TC3000 and TC5000 models only)

To determine the number of hours you have used your TreadClimber® machine:

1. With the TreadClimber® Main Power Switch turned on, stand on the side foot support platforms.
2. Remove and re-insert the SAFETY KEY.
3. The total whole hours used will be displayed in the TIME display window. No fractions of, or partial hours will be displayed.
4. The software version will also be displayed in the MILES display window.
5. The display will only be visible for 3-5 seconds. Repeat removing and re-inserting the SAFETY KEY to view the display again.

Storing Your TreadClimber® Machine

The TreadClimber® machine weighs 185 pounds when fully assembled, and should never be moved or lifted without taking some precautionary care.

There are two handles for lifting on the back of the base and two wheels on either side of the front of the base beneath the console.

The TreadClimber® machine requires 90 pounds of force to lift the base to achieve the 30 degree angle necessary to roll it on the front wheels. As this is a considerable amount of force, it is highly recommended that you do not attempt to ever lift or move the TreadClimber® machine without help.

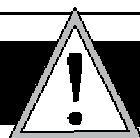
When lifted properly, your TreadClimber® machine can be rolled on the wheels for storage and/or cleaning. Failure to follow precautions could result in physical injury to you, or damage to the machine, or both.



TreadClimber® Base - Front Wheels



TreadClimber® Base - Rear Lift Handles



WARNING

Do not use the uprights, arms, or console to lift or move the TreadClimber® machine. Doing so could cause physical injury to you, and could damage or destroy the TreadClimber® machine.



WARNING

During the entire calibration process, stand on the side foot support platforms or rubber mat only, do not stand on the walking belts!

Calibration

(TC3000 and TC5000 only)

DO NOT STAND ON BELT DURING CALIBRATION.

The TreadClimber® Model TC3000 and TC5000 must be calibrated after replacing a component such as a belt or motor, and after a power outage.

Calibrating the TC3000 and TC5000 is an important part of troubleshooting and maintenance.

1. Plug power cord into wall outlet, and turn on power switch.
2. Stand on the side foot support platforms or rubber floor mat, DO NOT STAND ON THE WALKING BELTS.
3. Insert the Safety Key.
Note: If the Safety Key is not fully inserted into the safety keyhole, the TreadClimber® fitness machine will NOT power up.
4. Press and hold down the POWER and SLOWER buttons.
5. While continuing to hold down the POWER and SLOWER buttons, remove and re-insert the Safety Key.
6. Release the POWER and SLOWER buttons. The TIME display will read "CAL", "PrSS", "Strt".
7. Press the START/STOP button. This will start the calibration procedure.
8. During the calibration procedure, the belts will start and stop and the displays will show various numbers that relate to calibration—DO NOT INTERRUPT CALIBRATION.
9. When calibration has completed "CAL PASS" or "CAL DONE" will show in the TIME display.
10. Remove and re-insert the Safety Key to clear the displays.

Note: During calibration 100 ft LED on TC5000 signifies belt speed sensor, 1000 ft LED is step sensor. During calibration, some models of the TC3000 will show the step sensor in the DISTANCE window as a heart and the speed sensor in the SPEED window as a heart.

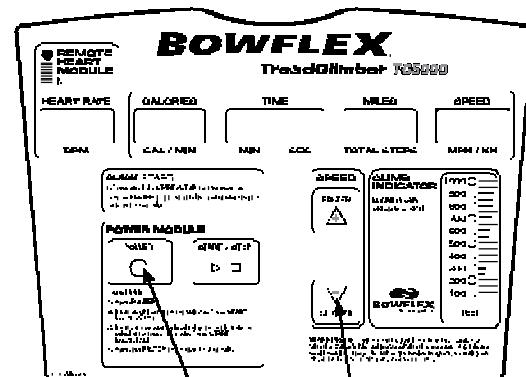


Figure 1
TC5000 Power & Slower Buttons

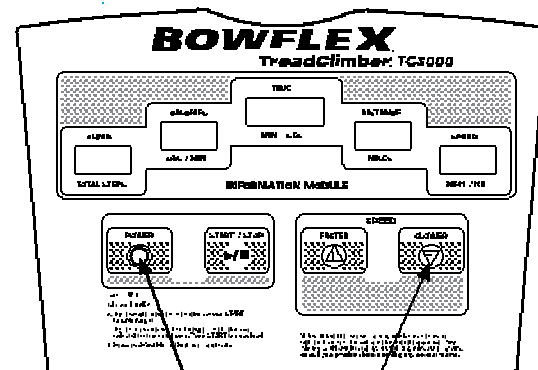


Figure 2
TC3000 Power & Slower Buttons

COMMON SERVICE PROCEDURES

Explanation of Calibration Display Messages (for information only):

During calibration, the TIME display will show you text messages updating you as to the status of calibration. When there is no text message in the TIME display window, the other displays will show the following:

HEART RATE (TC5000 Only) – will show the status of the motor control relay.

- ON signifies the power relay is on and energizing the motor.
- OFF signifies the motor control relay is off and not energizing the motor.

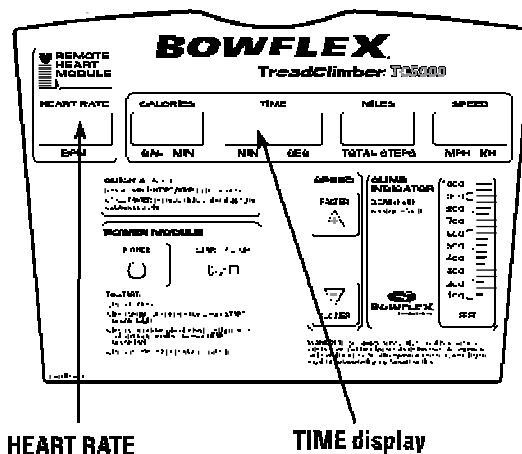
CALORIES/CAL PER MIN – will show the version number of the software.

TIME – will show either a text message regarding auto-calibration ("done", "Start", etc.) or the actual Pulse Width Modulation (PWM) number. PWM is a number that provides digital information about base unit functions to the console when START/STOP, FASTER or SLOWER is pressed during calibration.

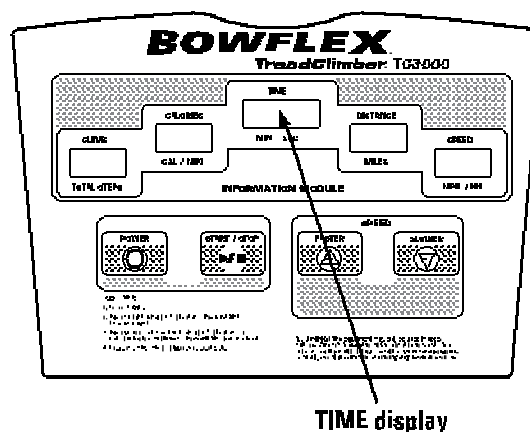
MILES/TOTAL STEPS (DISTANCE/MILES for TC3000) – will show the calibration of the total step count.

SPEED – will display the actual belt speed during the calibration function.

TC5000



TC3000



Align the Walking Belts

If either of the walking belts are tracking excessively to one side or the other, adjust the front roller of each treadle.

1. Standing beside the unit, set the speed to 2 mph (3.2 km/h).
2. Standing in front of the unit you will see adjustment bolts on each end of each front roller (Fig. 1). If the belt is tracking too far to the right, adjust by either tightening the right adjustment bolt or loosening the left adjustment bolt on that roller using the provided hex key in quarter turn increments.

NOTE: A guideline for proper alignment position is the inside of the belt should run along (roughly) the seam just off the inside edge of the roller.

3. If the belt seems to be tracking too far to the left, adjust by either tightening the left adjustment bolt or loosening the right adjustment bolt on that roller in quarter turn increments using the provided hex key.

NOTE: A guideline for proper alignment position is the inside of the belt should run along (roughly) the seam just off the inside edge of the roller.

4. If the belts are running at a diagonal install the Rear Belt Guide Kit (Fig. 2).
5. If belt cannot be aligned by adjusting the tension from side to side then the treadles should be replaced.

Note: Belts should not be so tight that you cannot get your hand snugly under them when machine is turned off and unplugged.

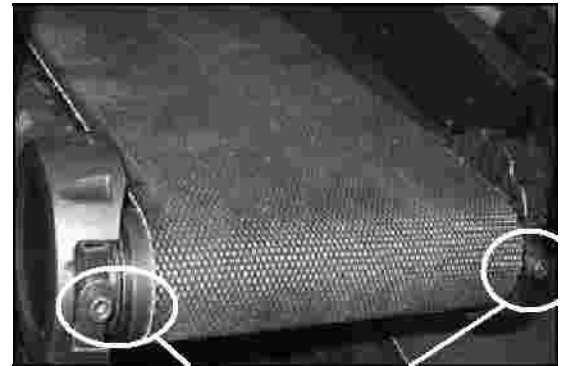


Fig. 1

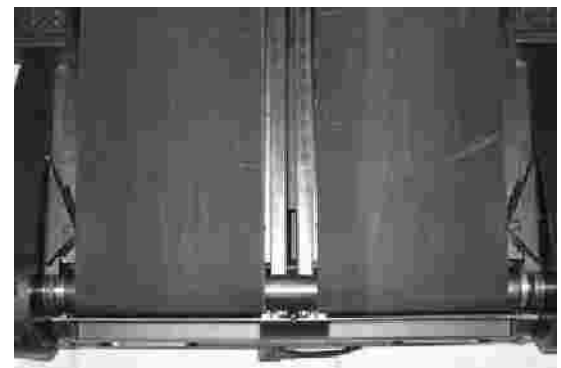


Fig. 2

COMMON SERVICE PROCEDURES

Correct a Hesitating or Slipping Belt

If belt hesitates or slips when walking on unit it may be caused by the belt itself or a problem with the drive shaft. Or it may be caused by improperly lubricating the belt deck surface.

To determine the cause perform the following test:

1. Stand beside TreadClimber® fitness machine and set speed to 2 mph (3.2 km/h).
2. Step on one treadle and attempt to stop treadle movement. If, while stepping on treadle, the roller at back of treadle is still rolling, it is likely the belt. If, while stepping on treadle, roller stops, it is likely the drive-belt.

Adjust the walking belt:

1. Adjust walking belt tension at the front of the unit using a hex wrench on the exposed adjustment bolts located on each side of each front roller.
2. Tighten (turn clockwise) each adjustment bolt in half turn increments. Be sure to adjust both bolts on each roller the same amount as to not disrupt belt alignment.
3. After each adjustment, restart unit and check to see if belt slippage has been eliminated.
4. Repeat if necessary (it may take a couple of full turns). If slipping feel persists after several adjustments, stop and refer to adjusting the drive-belt section below.

Adjust the drive belt:

1. Ensure the shipping bolt has been removed from the bottom of the unit.
2. Then unplug power from unit. Wait at least 5 minutes.
3. Remove left side plastic drive cover to expose "V" drive-belt.
4. Tighten nut on the motor tension bolt located on front side of motor in ½ turn increments until drive belt slippage is eliminated. Do not over-tighten.
5. Reinstall plastic drive cover.



Fig. 1

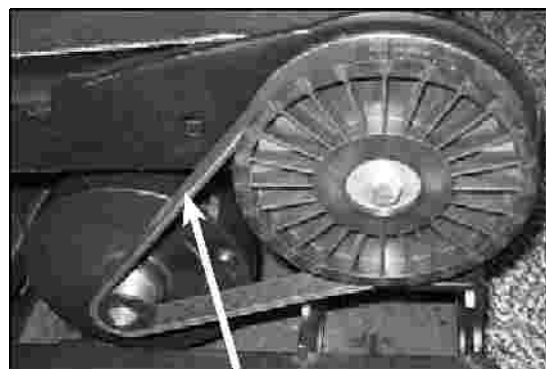


Fig. 2

V-BELT



Fig. 3

NUT ON MOTOR TENSION BOLT

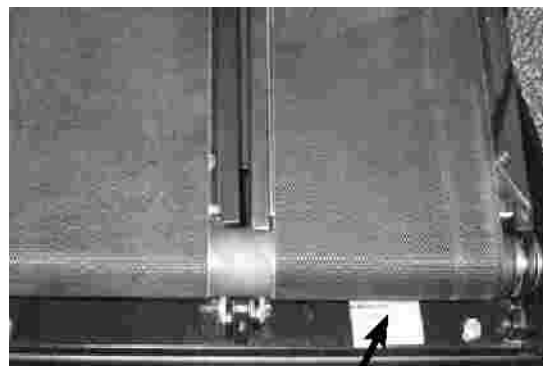
Restore Clearance Between Treadle and Upright

Update roller and base

1. Ensure unit is single roller assembly. If not, install P/N: 12735 Retro Fit Kit.
2. If unit has a single roller assembly ensure unit has roller mount casting that will allow base adjustment. See below for visual example or verify the 5000.1 serial number is greater than 040430.
3. If the serial number is not greater than 040430, install P/N: 12764 TC Rear Drive Cast Base.

Align the treadles

1. Remove the Right and Left Drive Covers and the Rear Cover.
2. Remove the Drive belt (you may try the first time without removal of the belt but if it returns to same position it will be necessary to remove the belt).
3. Loosen the 4 bolts that secure the Rear Drive Cast.
4. Visually center the treadles between the uprights (if attempting to do this without removing the drive-belt it will be necessary to insert something between the upright and the side of the treadle to hold it in place).
5. Retighten the 4 bolts.
6. Replace the drive-belt.
7. Replace the Rear Cover and the Right and Left Drive Covers.



TYPICAL SERIAL NUMBER LOCATION. SOMETIMES LOCATED ON OPPOSITE SIDE OF REAR BASE.

Secure the Treadle Alignment

Sometimes treadles will not stay aligned. Generally this is caused by improper tightening of the bolts securing the treadle to the base. Once the treadles work their way out of alignment they are likely to continue having this issue. Obtain a Retro Kit small HDW bag which contains additional bolts to resolve the issue.

Note that some of the parts in this bag will not be needed for the treadle alignment correction. You will need the four nuts & bolts, and four of the square plates shown below. Save the speed sensor and back-plate screws as extras.

Add these four bolts in addition to the four used in the initial assembly. These go through the four unused bolt holes in the rear baseplate.

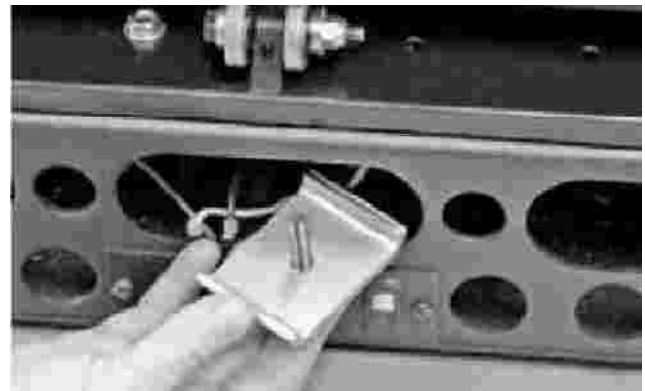


Fig. 1

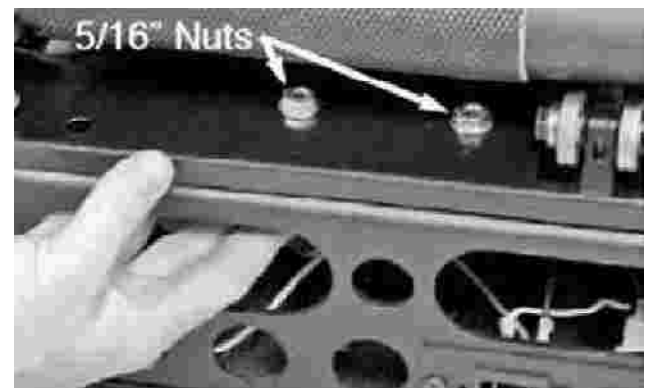


Fig. 2

Restore Treadle Locking (Treadmill Mode)

Teeter Turnbuckle bolts require adjustment

1. Move treadles while in the Treadclimber® exercise mode until they are even with each other.
2. Release the red handled latch with your foot and let it pop up. The unit is now in the Treadmill mode.
3. Loosen both nuts on the top and bottom of one side of the turnbuckle (See Fig. 1). NOTE: One of the nuts will be left handed.
4. Using a pair of pliers, turn the teeter adjustment bolt counter-clockwise (See Fig. 2). You will see the teeter start to slowly rise. As the teeter rises watch the location of the lower plastic stop block in relation to the plastic blocks on the treadles. The treadle blocks should overlap the bottom block by approximately one half length.
5. Re-tighten the nuts on each side of the screw.



Fig. 1

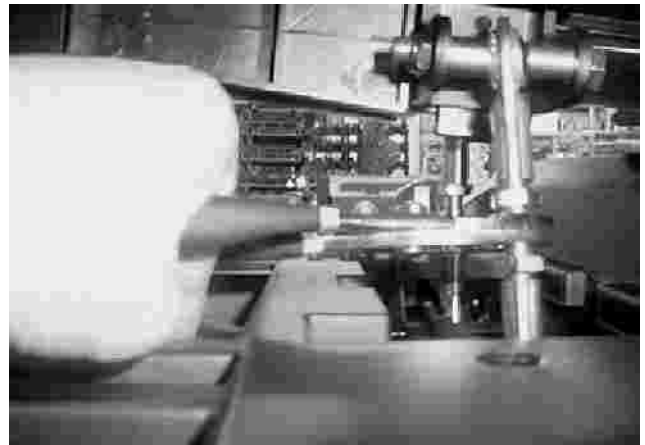


Fig. 2

Balance Treadle Resistance

(Imbalance in treadle resistance also known as dominant leg)

To correct this issue, it is necessary to work directly with the consumer to determine whether the imbalance is caused by equipment malfunction or stepping technique.

1. Instruct the consumer to review the dominant leg video on the TreadClimber® website. This can help explain how to operate the TreadClimber®.
URL: <http://www.treadclimber.com/global/target.jsp?adID=DEGDOMINAN2>.
2. Verify that the hydraulics are installed properly. The large indicator triangle which has no number in it must face the rear of the machine. The rear is where the power switch and power cord are located. Correct the orientation of the hydraulic cylinders if necessary.
3. Verify the resistance settings are the same for each hydraulic cylinder.

The Treadclimber® Assembly/Owner's Manual includes a chart with suggested starting resistance levels based on the user's weight. Refer to the chart and adjust the hydraulic cylinders to these settings.

4. Turn on the Treadclimber® fitness machine and place it in Treadclimber® exercise mode.
5. Instruct the consumer to mount the TreadClimber® fitness machine and set the speed to 2.0 mph.
If the unequal resistance persists, instruct the consumer to step forward and walk on the front of the treadles.
6. If the consumer still experiences unequal treadle resistance:
Turn off the machine, swap the hydraulic cylinders from one side to the other, and repeat Step 5.
7. If the unequal resistance has reversed sides, replace the hydraulic cylinders.
8. If the unequal resistance persists but on the same side as when reported. The perceived difference in resistance is due to the consumer's stepping technique. Explain that they may find it helpful to take a slightly longer stride on the treadle that they are having difficulty depressing. This will compensate for the strength of the other leg.



9. Explain that, "Everyone naturally has a stronger leg. Because of this, you tend to apply more pressure per step with that leg than with the other. It may take a week or two of steady usage, but your body will learn to redistribute your center of gravity evenly with each step."

Explain that the Treadclimber® fitness machine is a unique 3-in-1 machine that allows you to walk forward and up and down at the same time in a way that our bodies are not accustomed to. Direct customer to URL listed in step 1.

TROUBLESHOOTING PROCEDURES

No Power

Perform the following checks:

1. **Power Cord**- Make sure power cord is firmly secured to A/C inlet on the rear of the unit and firmly inserted into wall socket. The TreadClimber should not be connected to an extension cord or surge protector. Use of an outlet with a GFI (ground fault interrupt) may cause the GFI circuit breaker to trip..
2. **Power Switch** - Make sure power switch at the rear of the unit is in the "ON" position.
3. **Safety Key** - Make sure safety key is fully inserted into control panel.
4. **Household Circuit Breakers** – Make sure household circuit breaker is working. Make sure that this is a non-GFI (ground fault Interrupt) circuit.
5. **Household Fuse** – Make sure fuse for room is working correctly. Verify this by checking other outlets in room for functionality.
6. **Outlet/Light switch** – If outlet is controlled by a wall switch, check to make sure switch is turned on.
7. **Outlet** – Make sure outlet is functioning correctly. Verify this by testing another electrical device in the same outlet. A high-current device such as a toaster is recommended.
8. **Wire Connections** - (unplug unit from power) Remove plastic drive covers and rear cover. Refer to the provided LED diagram and check to make sure each wire connection is secure and in its proper location. Including cables that run up to and inside control panel. Verify connections of wires running from AC inlet to motor control board.
9. **Power Cord ITE** – Make sure the power cord has continuity throughout by exchanging it with a computer (Information Technology Equipment) ITE cord.
10. If the unit still has no power check that LED "J" is lit on the MCB when powered on.
11. If LED "J" is not lit replace snap in A/C inlet. If J still does not light replace MCB.
12. If LED "J" is lit but machine is not operating proceed to "Control Panel Does Not Power Up" section on next page.

Control Panel Does Not Power Up (Model TC 3000 and TC 5000 only)

If the control panel fails to “beep” or light up when you push the Power Button:

1. Follow the steps found on the previous page under the section titled “No Power” to be sure MCB LED “J” is lighting up. If this light is lit proceed with following steps.
2. Verify that the safety key is fully engaged.
3. Remove right plastic drive cover to allow access to LED board. Caution: Machine is on. Current is active!! Check the lower board to verify that the correct LEDs are lit. The following LEDs should be lit if the unit is plugged in, turned on at the base of the unit, and not being used: B, C (if treadles are even), G, J

If LED B is not lit, then the control panel is not getting the voltage it needs from the motor controller or the I/O harness is shorted.

- a. Disconnect power to the TreadClimber®.
- b. Disconnect the I/O harness from the motor control board (MCB).
- c. Reconnect power. If the light is still off the MCB will need to be replaced.

If LED C is not lit, treadles may not be even. This will not affect the ability of machine to turn on.

If LED G is not lit, this implies that the low voltage transformer may not be working.
Replace MCB.

If LED J is not working, this implies that there is no AC to MCB. Refer to section titled “No Power” on previous page.

4. If the motor-control LEDs are correctly illuminated, check the I/O/Power cable to make sure cable is connected to J1 on the control panel and P5 on the motor controller. Visually inspect it all the way across.
5. If the connections are good and the control panel still does not power up, test both I/O cables for continuity or if tester not available replace both cables.
6. If I/O cables have been verified replace console electronics.



Console Error Codes

"Cal Fail", "Err LS", "Err OS", "Err E5_S", "Err E2_C", "Err E3_E"

(Models TC 3000 and TC5000 only)

These errors indicate that the console is unable to determine the speed of the belts. Potential parts associated with this are the Speed Sensor, MCB, Motor, I/O cables, and Upper Electronics.

1. Cal Fail or Error Code

2. Unplug the unit and remove the three back covers.

3. Place a stiff business card, ID card, or other similar card onto the inside of the drive pulley.

- a. Adjust the speed sensor towards the card until it just makes contact.
- b. Remove the card.
- c. Plug unit in and recalibrate.

4. If calibration fails:

- a. Did the belts move?
 - i. Yes? Go to step 5
 - ii. No? Continue to step 6

5. Calibration Failed, Belts Moved:

- a. Calibrate unit
- b. Watch the PWM reading in the time display. If the reading doesn't fall within 220-250 then follow the Potentiometer (POT) Adjustment Instructions.
- c. If the PWM readings are within the range of 220-250:
 - i. Refer to the assembly manual. Check the I/O cable connections.
 - ii. Recalibrate.
 - iii. If calibration fails, replace I/O cables.

6. Calibration Failed, No Belt Movement:

- a. Direct the customer to the MCB on the right side of the unit.
 - i. Identify the "D" light
 - ii. Simulate belt movement by carefully pulling the belt from front to back.
 - iii. If belts are unable to be moved, check belt tension.

- iv. If tension is good, remove drive belt.
- v. Check if drive pulley can be rotated by hand. If not, rear roller assembly.
- vi. Check if motor can be turned by hand. If not, replace motor.

b. If the "D" light did not flash:

- i. Remove the speed sensor from the unit and replace it.
- ii. Simulate belt movement.
- iii. If the "D" light still does not work, check the jumper wire for breaks or cuts.
- iv. Replace the jumper wire if broken. Replace the speed sensor if wire is not broken.
- v. If all of these steps do not result in the "D" light functioning, replace the MCB.

c. If the "D" light is on steady:

- i. Verify that the safety key is in place.
- ii. Move treadles up and down. If D light flashes as treadles pass each other swap speed and step sensor plugs at MCB. Attempt calibration
- iii. Check speed sensor jumper wire. If crimped or pinched replace. Other wise replace speed sensor.
- iv. If all of these steps do not result in the "D" light functioning, replace the MCB.

d. If the "D" light flashes:

- i. Check that the shipping bolt was removed.
- ii. Check that drive belt and walking belt tension is within specifications
- iii. Verify belts have been properly lubricated.
- iv. Calibrate unit
- v. Watch the PWM reading in the time display. If the reading doesn't fall within 220-250 then follow the (POT) Adjustment Instructions on page 20.
- vi. Check the I/O connections.
- vii. Recalibrate
- viii. If calibration still fails, replace I/O cables.
- ix. If I/O cable replacement does not resolve, replace drive motor.

Console Error Codes continued...

Potentiometer (POT) Adjustment Instructions

In some cases you may need to adjust the potentiometer labeled "speed" or "spd" on the motor control board. Attempt calibration and note the figure displayed in the time display as well as whether the speed readout reached 4 MPH.

1. If no and the time display is under 220: Adjust the speed potentiometer by 5 degrees clockwise.
2. If no and the time display is over 250: adjust the speed potentiometer by 5 degrees counter clockwise.
3. Repeat until calibration passes.
4. If the time display and the speed display never reach the ranges above, replace the MCB.

E1

(TC 1000 only)

1. If belts move prior to the error, check speed sensor for proper positioning. Correct the position if necessary, and make sure sensor wire is connected.
2. Cycle power off and back on then check if error persists.
3. Cycle power off and back on again. If belt doesn't start, refer to TC 1000 Belts Won't Start in the Mechanical Troubleshooting section.
4. If belt starts but stops again and displays the E1 error, replace the upper console and 49 inch I/O cable.
5. If the above steps do not bring resolution, replace the MCB.

Step Data Not Updating

This condition does not produce an error message. It becomes evident when the value in the Distance/ Total Steps display is not incrementing with each step. In order for a step to register, the pedals must pass each other completely. This ensures that the magnet on the Step passes the step sensor.

1. Turn the power Off and back On and go into Calibration Mode.
2. Verify that the step sensor is working by looking for the following indicators: (TC5000) in calibration mode, the top light on the climb indicator will be lit, (some TC3000s) in calibration mode the heart in the distance display will blink.
3. Remove right plastic drive cover.
4. Check the activity of LED C on the motor control board. Normally, the LED lights briefly each time the sensor mounted on the right pedal passes the magnet mounted on the chassis.
5. If this is occurring and the display is not updating, check the connection of the I/O/ Power cable at the motor controller and the control panel. If these are connected correctly and the problem still exists, the I/O cable or the control panel is likely faulty.

If LED C does not light when the sensor passes the magnet, check the step sensor by performing the following:

1. Disconnect power to the machine and wait 5 minutes. Then, with the help of another, lay machine on its side.
2. Check step sensor positioning relative to magnet. Gap should be approximately the thickness of a penny.
3. Check step sensor connection s near sensor and at MCB. Check wire for any visible damage or pinching. Replace wire if damaged.
4. Turn machine upright. Reconnect power and turn machine on.
5. Recalibrate machine.
6. If problem persists, replace the step sensor.

TROUBLESHOOTING PROCEDURES

Address Knocking Noises

Upper Linkage Bolts – Unplug power from Unit. Beneath each treadle there is a bolt that connects the treadle to the linkage arm. Using two 9/16" wrenches, make sure these bolts are securely tightened.

Lower Linkage Bolts - Unplug power cord from rear of unit. With help, lay the unit on its side. Beneath the treadles you will see a linkage pivot system near the middle of the unit that ties the two treadles together. On each side of the linkage pivot, you will see two bolts that connect the linkage arms to the pivot system. Using two 9/16" wrenches, make sure these bolts are securely tightened.

Also on the linkage pivot you will notice a large bolt going through the center of the pivot containing two springs on each end of the bolt. Using two ¾" wrenches, or adjustable wrenches, tighten this bolt to fully compress the springs.

Drive Pulley and Flywheel Pulley - Unplug power from Unit. Wait at least 5 minutes. Remove left side plastic drive cover to expose "v" belt driveline. Using a ½" wrench, tighten the bolt that attaches the 4 ½" drive pulley to the drive shaft while holding the drive rollers still. Also, using a 5/32" hex wrench, tighten the setscrew on the flywheel motor pulley.

Hydraulic cylinder Bolts - Check and tighten both upper and lower bolts that connect the hydraulic cylinders to the unit. Make sure shock spacers are installed.

Front Rollers - If knocking sound seems to be coming directly from one or both of the front rollers, remove and replace rollers.

Squeak coming from center of unit (single roller unit only)
- replace friction block.

Noise coming from rear of unit - the IGUS assembly may be incomplete or damaged. Replace IGUS bushing.



Belts Previously Ran but then Stopped

1. Check to see if belts can be manually advanced. If not, the rear roller could be seized. Re-install shipping bolt to relieve drive belt tension. Attempt to advance belts again manually.

A. If belts still will not advance replace rear roller (single rear roller units) or treadle assembly & Retro Fit Kit (dual rear roller units).

B. If belts move with drive belt loosened but do not move when it's tight motor is seized. Replace motor.
2. Check to see if machine powers up in any way. If not, refer to No Power.
3. Check to see if error code is displayed. If so refer to section titled "Console Error Codes."
4. If none of the above is true proceed to machine calibration.

Belts run and won't stop (TC 1000 only)

If the belts on a TC 1000 immediately accelerate to top speed upon insertion of the safety key, do the following:

1. Remove the safety key and disconnect power.
2. Replace the motor control board (TC King I MOTOR CNTRL) and I/O Cable (TC King I MTR CBL 35IN).

Hot or burning odor

First check whether machine can calibrate and run properly. If machine calibrates and no error codes are displayed this indicates that there are no problems with the motor, motor control board, or console.

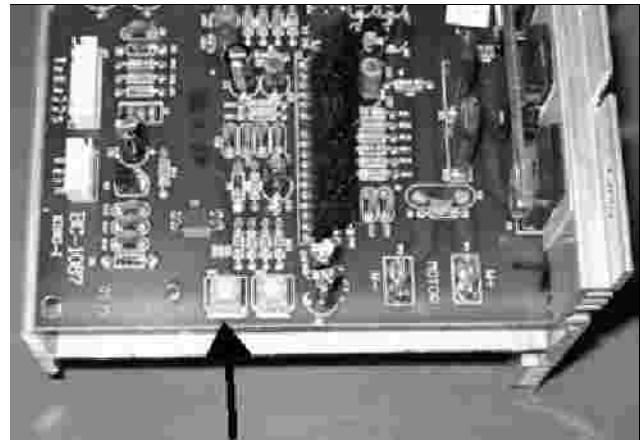
Note: In most cases these are normal odors generated as the machine breaks in. There are various coatings that emit odors when they are new and subjected to the heat of normal machine operation. This process can be hastened by running the TreadClimber® fitness machine at 3 mph for approximately one hour. This should give the odors a chance to dissipate. Also, odors may occur any time a motor or motor control board is replaced. If machine is not new and no parts have recently been replaced an odor may indicate belt lubrication is required. Refer to Walking Belt and Deck Lubrication for procedure and frequency.

TC 1000 Belts Won't Start

Verify machine is getting power and all wires are connected securely. If machine is getting power and belts will still not move adjust the speed potentiometer (pot) to set the machine for the current climate/elevation.

1. Disconnect power to machine and wait 5 minutes
2. Turn dial on speed pot clockwise approximately 30 degrees.
3. Reconnect power and check for belt movement
4. If belts still don't move repeat above instructions

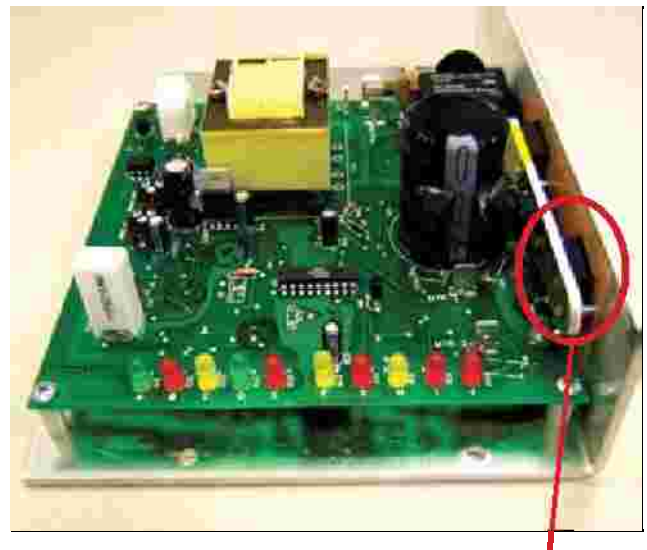
Note: The picture below shows the side of the Motor Control Board (MCB) as seen from the right side of machine with side covers removed.



TC1000 MCB showing Speed Potentiometer

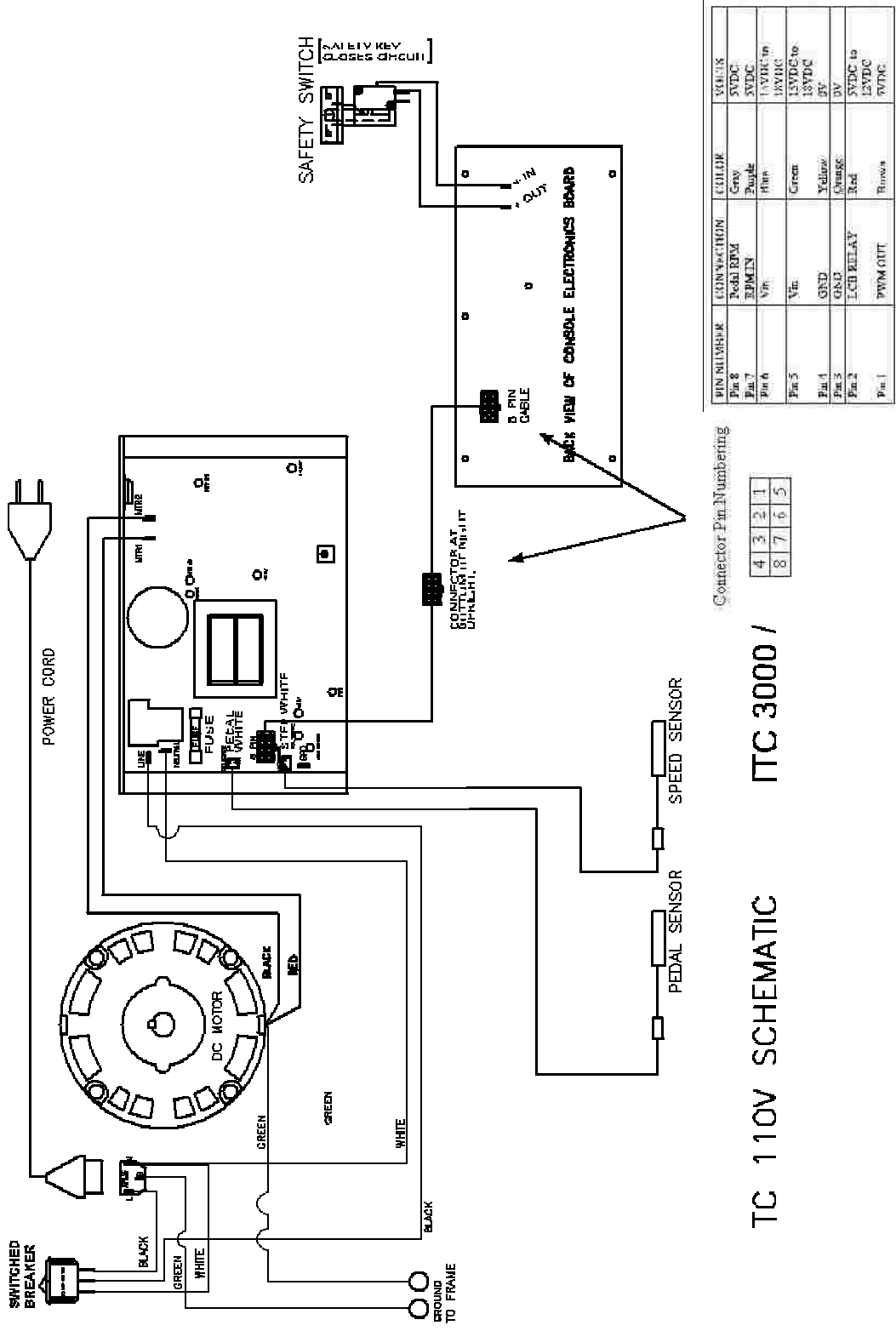
TC 3000 / TC 5000 Belts Won't Start

1. Verify machine is getting power and all wires are connected securely.
2. Make certain the wires that provide power to the motor are connected to the motor control board (MCB). See picture for location.
3. Try calibration again.
4. If calibration begins but belts still won't start, listen for an audible "click" coming from the MCB when the start button is pushed to begin calibration.
5. If click is not heard replace MCB.
6. If click is heard but belts still do not move this indicates that the motor is likely bad. Replace motor.

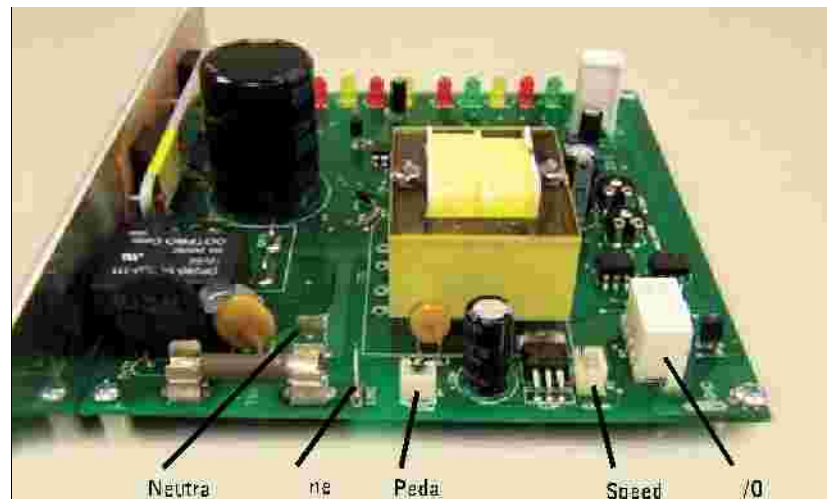


Spade connections for motor power wires

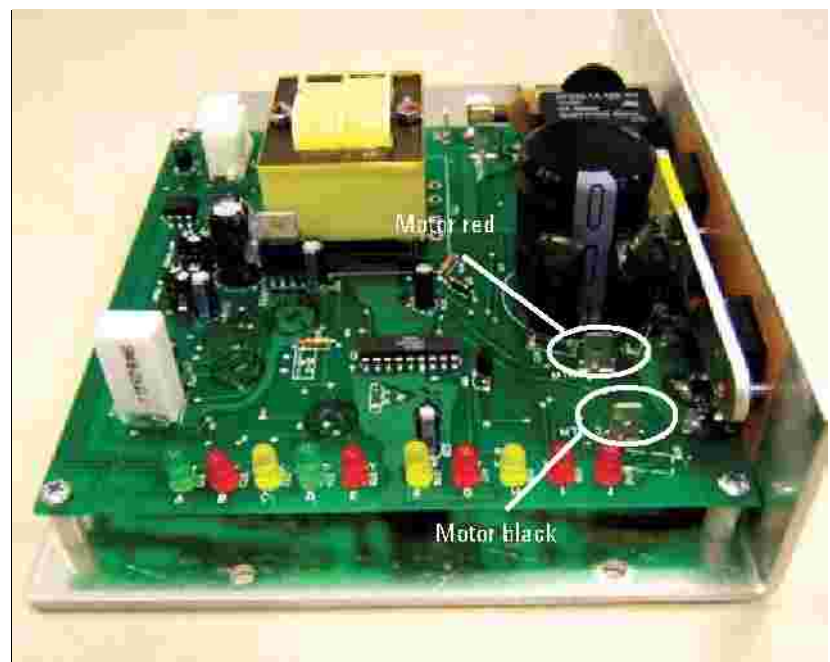
Electrical Layout (TC 3000 and TC 5000)



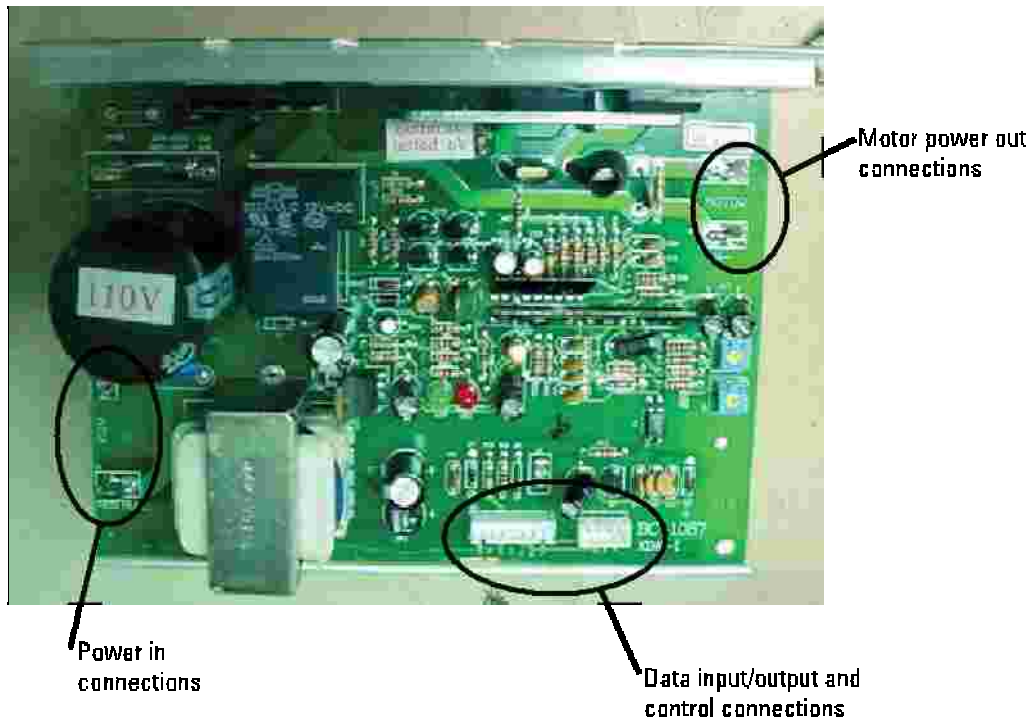
Motor Control Board (MCB)



TC5000 MCB Connections



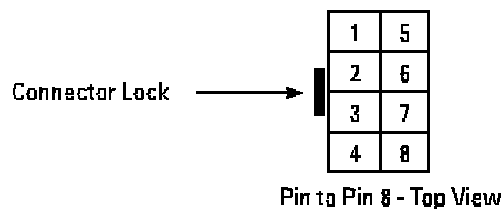
TC5000 MCB with LED troubleshooting indicators



TC1000 MCB

8-Pin Connector Diagram (for experienced technicians, will require a multi-tester)

PIN NUMBER	CONNECTION	COLOR	VOLTS
Pin 8	Pedal RPM	Grey	5VDC
Pin 7	RPM In	Purple	5VDC
Pin 6	Vin	Blue	15VCD to 18VDC
Pin 5	Vin	Green	15VCD to 18VDC
Pin 4	GND	Yellow	0V
Pin 3	GND	Orange	0V
Pin 2	LCB Relay	Red	5VDC to 12VDC
Pin 1	PWM Out	Brown	5VDC

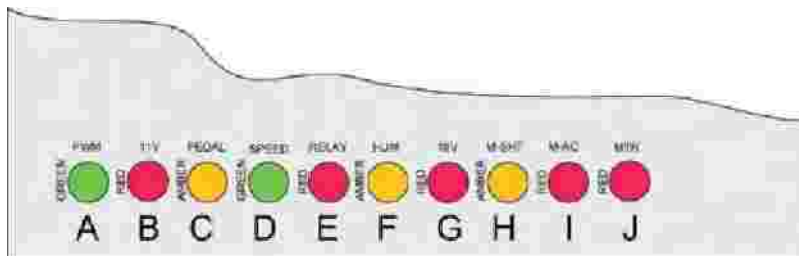


TROUBLESHOOTING PROCEDURES

Location of motor control board
with LED array



LED Diagnostics



The function of each LED is as follows: Normal LED Behavior:

A Turns on when the incoming PWM signal is logical high. The LED will seem to become brighter as the incoming PWM approaches 100% because it is flashing at a greater rate than the human eye can see. This LED is speed sensitive, and will be on when the motor is turning. FUNCTION: MCB is sending power to the motor. RESOLUTION: If motor is receiving power then the motor is fine. Customer will need new I/O cables. If there is no power to the console then customer will need both the I/O cables and upper console.	Motor Running
B Turns on when the voltage regulator on the transformer secondary attached to Chassis Ground that supplies the control panel outputs power. This indicates that the low voltage transformer is working and implies that there is enough power to turn the control panel on and that the "cold" side electronics is active. This LED should always be on when the lower board is active. FUNCTION: When plugged in there is power to the MCB to send to the console. RESOLUTION: If LED is not lit send customer a new MCB.	Power (Plugged In)
C Flashes each time the magnet passes the step sensor. This indicates that the pedal sensor is working and communicating with the motor controller. Does not indicate that the control panel is receiving the pedal feedback. This LED will also be on when treadles are parallel. FUNCTION: Tells you that the step sensor is functional. Machine will still work if the step sensor doesn't. Treadclimber won't be able to count steps. RESOLUTION: Send customer new step sensor. Customers do receive an extra sensor when they purchase their machine that can be used as either the step or speed sensor if needed.	Step Sensor

TROUBLESHOOTING PROCEDURES

D Flashes each time a magnet passes the speed sensor. This indicates that the speed sensor is working and communicating with the motor controller. Does not indicate that the control panel is receiving the speed feedback. This LED will also flash when you manually advance the treadle belt. FUNCTION: Tells you that the speed sensor is functional. The belts will not move if the speed sensor is not functional. RESOLUTION: Have customer check the speed sensor to make sure that it is a dimes width away from the fly wheel. If sensor damaged then send a new speed sensor. Customers do receive an extra sensor when they purchase their machine that can be used as either the speed or step sensor if needed.	Speed Sensor
E Lights when the control panel commands the relay to turn on. This indicates that power is present at the relays to energize them. It implies that the motor controller and the control panel are communicating. If safety key is in, and power is on this LED should be lit. FUNCTION: LED lights up when the safety key is inserted. RESOLUTION: If the LED is not lit and the machine is still working send a new MCB because the LED is burnt out.	Control Panel Power – Safety Key is inserted
F Turns on when the current flowing through the motor reaches the circuit set maximum. This indicates that the system is loaded to or beyond its capacity. This LED is normally off. FUNCTION: If LED is on there is to much current flowing the motor. RESOLUTION: Have customer turn off the machine. Send a new motor and advise customer that they should not turn on their machine until the motor is replaced.	WARNING Motor Issue
G Turns on when the transformer secondary that is attached to power ground outputs power. This indicates that the low voltage transformer is working and implies that the “hot side” control electronics are active. If the machine is plugged in and turned on this LED should be lit. FUNCTION: Turns on when you have turned the power on the machine. RESOLUTION: If the LED is not lit have customer check to see if the main power switch is on. If the power switch is on and the LED is NOT LIT then send customer a new AC Junction Kit 000-7919 for the TC5300 and a new AC Inlet #12723 for the TC1000, 3000, 5000. If the LED is lit then send a new MCB. Make sure to check service manual and part diagrams to confirm part numbers.	Power
H Turns on when excessive current passes through the FET. This LED implies that there is a short in the motor or motor wiring. Note: This is a WARNING light! FUNCTION: If LED is on there is to much current flowing the motor. RESOLUTION: Have customer turn off the machine. Send a new motor and advise customer that they should not turn on their machine until the motor is replaced.	WARNING Motor Issue
I Turns on when AC power passes the relay and begins to charge the large capacitors. This indicates that the relay has energized correctly. Power button on console is on. FUNCTION: Turns on when you have turned the power on the machine. RESOLUTION: If the LED doesn't light up when the power is turned on then send the customer a new MCB and I/O Cables.	Power
J Turns on dimly when power is first applied and becomes bright when the large capacitors are charged. When the LED is bright this indicates that the motor controller is ready to power the motor. This LED light stays on briefly after the machine is unplugged. Once the light goes out, this indicates that all charge has died. FUNCTION: LED turns on when the machine has power and is charged. RESOLUTION: If the LED doesn't light up send the customer a new MCB.	Power

TROUBLESHOOTING PROCEDURES

LED Diagnostics (cont.)

<u>Operating Mode</u>	<u>LED that should be lit</u>
Unit plugged into outlet prior to pushing "Power" button	B, G, J, and C will be lit if treadles are parallel.
Unit plugged into outlet "Power" button enabled	B, E, G, I, J, and C will be lit if treadles are parallel.
Unit plugged into outlet "Power" button enabled	B, E, G, I, J, and C will blink if treadles are moving up and down.
Unit plugged into outlet "Power" enabled, treadles parallel, and speed set to 1 MPH.....	A, B, C, E, G, I and J A may be dim; D will blink on/off
<u>Failure Mode</u>	<u>LED that should be lit</u>
Motor reaches the circuit set maximum	A, B, E, F, G and I
Shorted Motor.....	A, B, E, G, H and I



WARNING

ALWAYS UNPLUG POWER CORD FROM TREADCLIMBER® FITNESS MACHINE TO WALL OUTLET, AND WAIT FIVE MINUTES BEFORE PERFORMING REPAIRS.

Replacing the Motor

1. Unplug power cord from rear of base unit.
2. Make sure front treadle latch is down in TreadClimber® exercise mode.
3. Remove right and left hydraulic cylinders (Fig.1).
4. Remove right and left plastic drive covers (Fig.1).
5. Remove rear cover (Fig.1).
6. Carefully set unit up on its right side. This will have the pulley side up and expose underneath of unit.
- 7(a). For double rear roller treadles remove teeter pivot bolt assembly (nut, bolt, springs, and spacers) to detach treadle linkage from base unit (Fig.2)
- 7(b). For single rear roller treadles remove the 3/8" x 3 3/4" shoulder bolt and 5/16" nylock nut attach the teeter assembly to base frame (Fig. 2A) using a 3/16" hex key and 9/16" open end wrench (Fig. 2B).



Fig. 1



Fig. 2

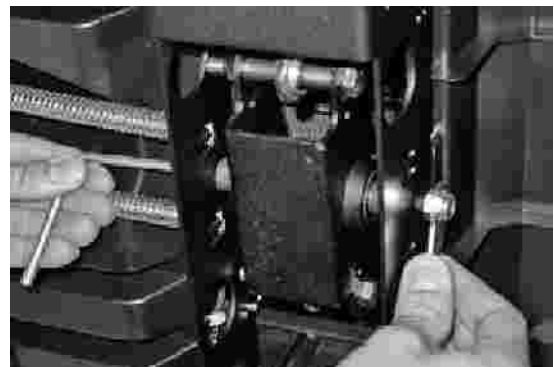


Fig. 2A

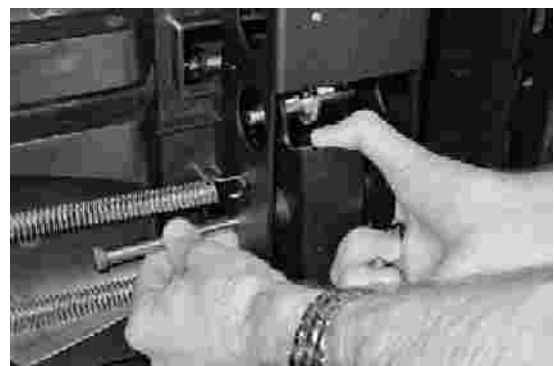


Fig. 2B

8. Remove motor keeper bracket on bottom of motor pan (Fig.3).
9. Carefully tilt unit back to an upright position.
- 10(a). For double rear roller treads, lift both treads simultaneously all the way back (Fig.4).
- 10(b). For single rear roller treads carefully remove drive belt from roller pulley and motor flywheel (Fig. 5 & 5A). Disconnect the speed sensor wire from the base connector (Fig. 6) Using a 9/16" wrench, loosen the (4) 3/8" x 1 1/4" hex bolts on the rear roller casting until removed from the base (Fig. 6A & 6B). With the help of another, slowly raise the treadle assembly off the base (Make sure the teeter mechanism passes freely through hole in the center of base as you lift treadle assembly) and set aside.

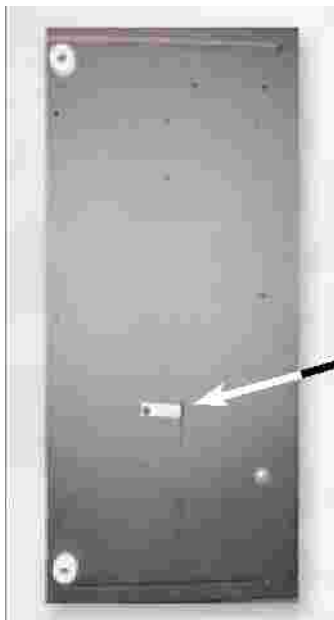


Fig. 3



Fig. 4



Fig. 5

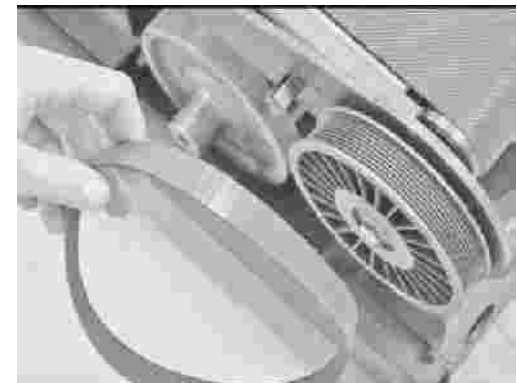


Fig. 5A

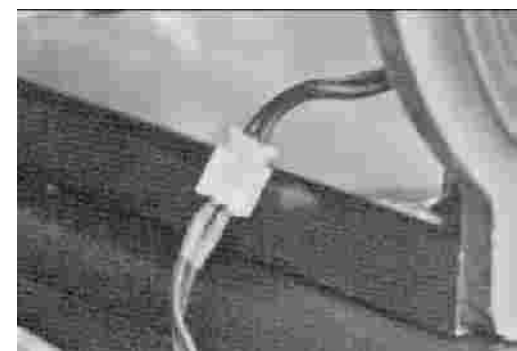


Fig. 6



Fig. 6A



Fig. 6B



Fig. 7

11. Remove (4) screws from safety cover to expose motor area (Fig. 7).
 12. Cut zip/wire ties that secure motor wires.
 13. Remove black and red motor wires from motor control board (Fig. 8 & 8A).
 14. Remove (green) ground wire that is held by a motor control screw.
 15. Remove nut and spring from motor tension bolt (Fig. 9).
 16. For double rear roller treadles, remove drive belt from pulleys (Fig. 10).
 17. Slide and lift motor assembly out of unit.
 18. Install replacement motor.
 19. Re-install motor assembly into base unit.
 20. For double rear roller treadles, re-install drive belt to flywheel and roller pulleys (Fig. 10).
 21. Re-install spring and nut for motor tension. When tightening the nut, there should be approximately 3/8" of exposed bolt sticking out of nut.
 22. Re-attach all motor wires and secure with wire ties where necessary (Fig. 8).
- Note: Black wire connects to spade lug MTR2 and Red wire connects to spade lug MTR1 (Fig. 8A).
23. Re-install safety cover (Fig. 7).



Fig. 8

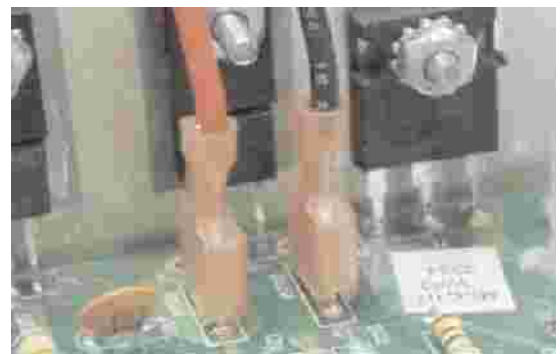


Fig. 8A



Fig. 9

**MOTOR TENSION
BOLT**

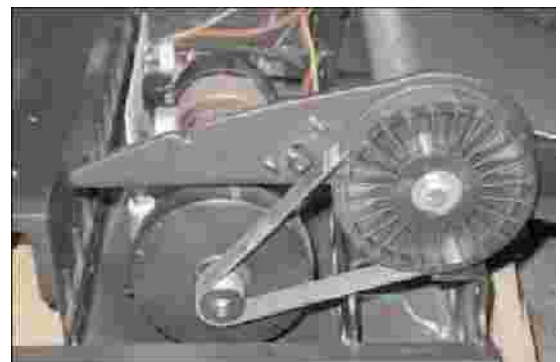


Fig. 10

REPLACING PARTS

24. Carefully lower treadles back to or on base unit. Make sure treadle teeter linkage passes freely into base unit.
25. For single rear roller treadles, with the help of another, slowly lower the treadle assembly on to the base (Make sure the teeter mechanism passes freely through hole in the center of base as you lower the treadle assembly). Using a $9/16"$ wrench, replace and tighten the (4) $3/8" \times 1 1/4"$ hex bolts on the rear roller casting to the base (Fig. 6A) removed during step 10(b). Carefully replace drive belt on to roller pulley and motor flywheel. Re-connect the speed sensor wire to the base connector (Fig. 6)
- 26(a). For double rear roller treadles, carefully lay unit over on its left side. Re-install teeter bolt assembly to base through teeter mechanism. Note: Make sure teeter is engaged in top of slot before final tightening of teeter bolt (Fig. 2). Tighten teeter bolt until springs are almost fully compressed.
- 26(b). For single rear roller treadles carefully set unit up on its right side. This will have the pulley side up and expose underneath side of unit (Fig. 11). Using the $3/8" \times 3 3/4"$ shoulder bolt and $5/16"$ nylock nut attach the teeter assembly to base frame (Fig 11A). Tighten using the $3/16"$ hex key and $9/16"$ open end wrench (Fig. 11B).
27. Re-install motor keeper bracket (Fig. 3).
28. Carefully tilt unit back to an upright position (Fig. 1). Note1: To align the drive belt, loosen the set screw on the flywheel with a 3mm allen wrench. Note2: Some replacement motors have flywheels that are not adjustable.
29. Re-install rear cover first, followed by the left and right drive covers and then the resistance shocks (Fig. 1).
30. Recalibrate the machine according to the Instructions in the Owner's Manual (TC3000 / TC5000 only) when complete, your Treadclimber® fitness machine should be ready to use.

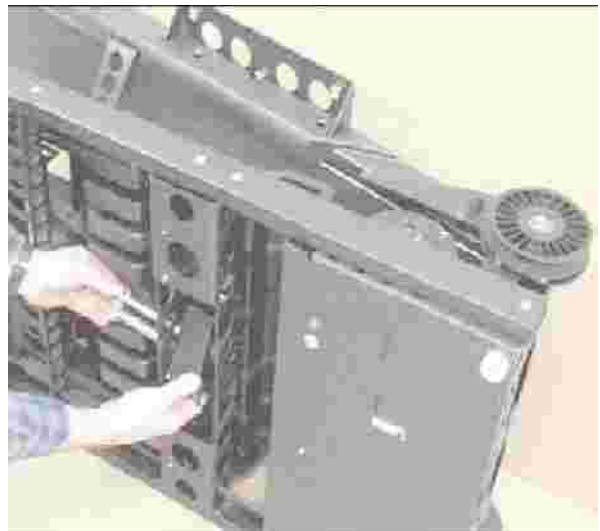


Fig. 11



Fig. 11A

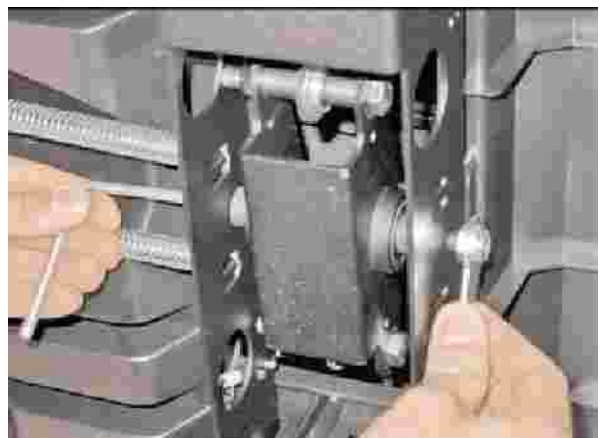


Fig. 11B

Replacing the Motor Base

1. Unplug the TreadClimber® fitness machine from the AC wall outlet.
2. Make sure front treadle latch is down in Treadclimber® exercise mode.
3. Remove right and left resistance shocks. (See Fig. 1)
4. Remove right and left plastic drive covers. (See Fig. 1)
5. Remove rear cover. (See Fig. 1)
6. Carefully lay unit over on its right side to expose bottom of unit.
7. Remove teeter pivot bolt assembly (nut, bolt, springs, and spacers) to detach treadle linkage from base unit. (See Fig. 2)
8. Remove motor keeper bracket on bottom of motor pan. (See Fig. 3)
9. Carefully tilt unit back to an upright position.
10. Lift both treadles simultaneously all the way back. (See Fig. 4)
11. Remove (4) screws from black aluminum safety cover to expose motor area. (See Fig. 5)
12. Cut wire ties that secure motor wires. (See Fig. 5)
13. Remove black and red motor wires from motor control board. (See Fig. 5)
14. Remove ground wire that is held by a motor control screw. (See Fig. 6)
15. Remove drive belt from pulleys. (See Fig. 7)
16. Remove nut and spring from motor tension bolt. (See Fig. 8)
17. Slide and lift motor assembly out of unit.
18. Remove two bolts and motor base from motor housing. (See Fig. 9)

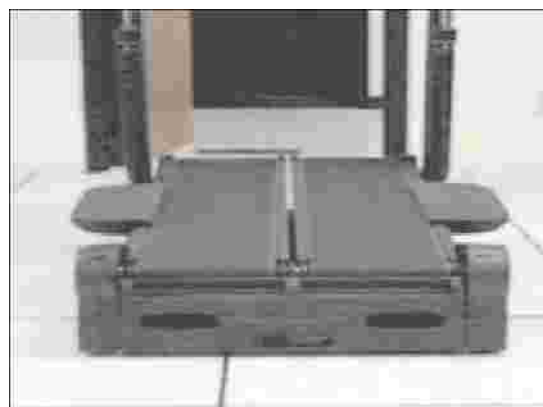


Fig. 1



Fig. 2



Fig. 3



Fig. 4

REPLACING PARTS

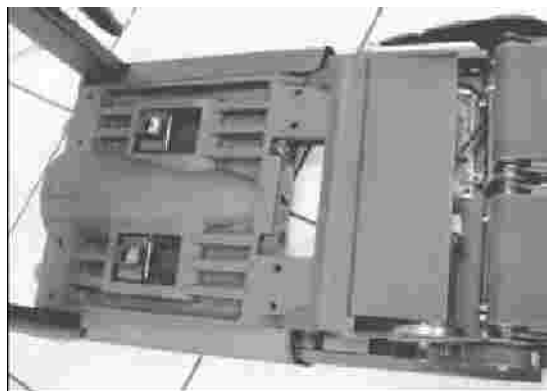


Fig. 5

19. Install replacement motor base with new provided bolts.
20. Re-install motor assembly into base unit.
21. Re-install spring and nut for motor tension. When tightening the nut, there should be approx. 3/8" of exposed bolt sticking out of nut. (See Fig. 8)
22. Re-attach all motor wires and secure with wire ties where necessary. (See Fig. 6)
23. Re-install black aluminum safety cover. (See Fig. 5)
24. Carefully lower treads back to base unit. Make sure treadle teeter linkage passes freely into base unit. (See Fig. 1)
25. Re-install drive belt to flywheel and roller pulleys. (See Fig. 7)
26. Carefully lay unit back over on its right side.
27. Re-install teeter bolt assembly to base through teeter mechanism. Make sure teeter is engaged in top of slot before final tightening of teeter bolt. (See Fig. 2)
28. Tighten teeter bolt until springs are almost fully compressed.
29. Re-install motor keeper bracket. (See Fig. 3)
30. Carefully tilt unit back to an upright position. (See Fig. 1)
31. Re-install left and right driver covers and rear cover. (See Fig. 1)
32. Re-install resistance shocks. (See Fig. 1)
33. Your Treadclimber® fitness machine should be ready to use.



Fig. 6



Fig. 7

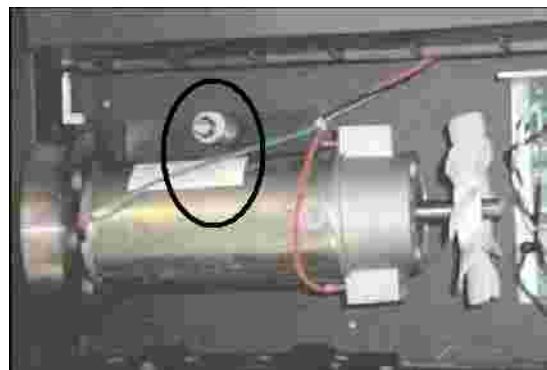


Fig. 8



Fig. 9

Replacing the Motor Control Board (MCB)

1. Unplug power cord from rear of base unit.
2. Make sure front treadle latch is down in TreadClimber® exercise mode.
3. Remove right and left hydraulic cylinders (Fig.1).
4. Remove right and left plastic drive covers (Fig.1).
5. Remove rear cover (Fig.1).
6. Carefully set unit up on its right side. This will have the pulley side up and expose underneath of unit.
- 7(a). For double rear roller treadles remove teeter pivot bolt assembly (nut, bolt, springs, and spacers) to detach treadle linkage from base unit (Fig.2)
- 7(b). For single rear roller treadles remove the 3/8" x 3 3/4" shoulder bolt and 5/16" nylock nut attach the teeter assembly to base frame (Fig. 2A) using a 3/16" hex key and 9/16" open end wrench (Fig. 2B).



Fig. 1

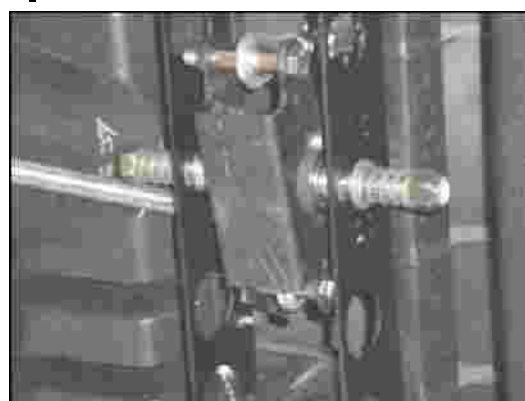


Fig. 2



Fig. 2A

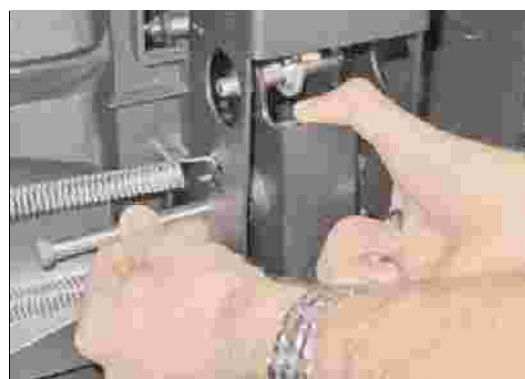


Fig. 2B

8. Carefully tilt unit back to an upright position.
- 9(a). For double rear roller treadles, lift both treadles simultaneously all the way back (Fig.4).
- 9(b). For single rear roller treadles carefully remove drive belt from roller pulley and motor flywheel (Fig. 5 & 5A). Disconnect the speed sensor wire from the base connector (Fig. 6) Using a 9/16" wrench, loosen the (4) 3/8" x 1 1/4" hex bolts on the rear roller casting until removed from the base (Fig. 6A & 6B). With the help of another, slowly raise the treadle assembly off the base (Make sure the teeter mechanism passes freely through hole in the center of base as you lift treadle assembly) And set aside. Keep treadles even to prevent damage.



Fig. 3



Fig. 4



Fig. 5

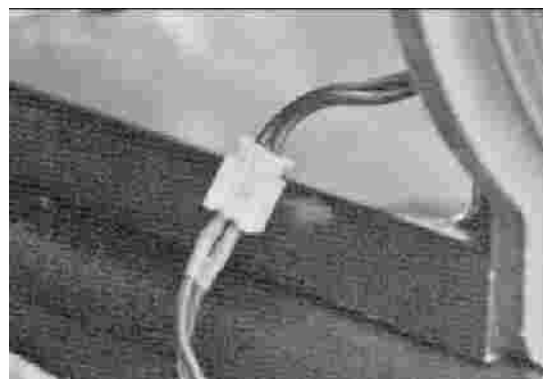


Fig. 6

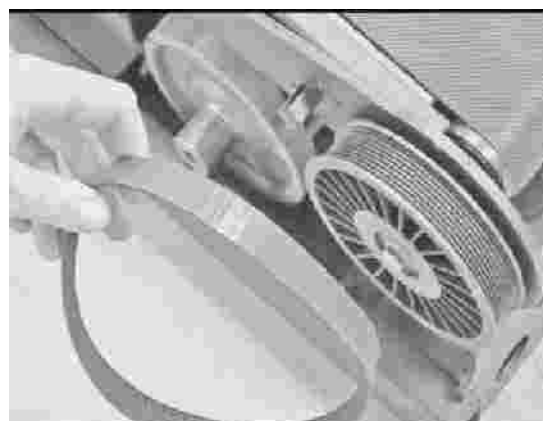


Fig. 5A



Fig. 6A



Fig. 6B

10. Remove (4) screws from safety cover to expose motor area (Fig. 7).
11. Remove wires from motor control board (Fig. 8).
12. Remove screws from motor control board and from motor housing.
13. Install replacement motor control board.
14. Re-attach all wires removed in step 11.
15. Re-attach all motor wires and secure with wire ties where necessary (Fig. 8). Note: Black wire connects to spade lug MTR2 and Red wire connects to spade lug MTR1 (Fig. 9).
16. Re-install safety cover (Fig. 7).
17. Carefully lower treadles back to or on base unit. Make sure treadle teeter linkage passes freely into base unit.
18. For single rear roller treadles, with the help of another, slowly lower the treadle assembly on to the base (Make sure the teeter mechanism passes freely through hole in the center of base as you lower the treadle assembly). Using a 9/16" wrench, replace and hand tighten the (4) 3/8" x 1 1/4" hex bolts on the rear roller casting to the base (Fig. 6A) removed during step 10(b). Carefully replace drive belt on to roller pulley and motor flywheel. Re-connect the speed sensor wire to the base connector (Fig. 6)
- 19(a). For double rear roller treadles, carefully lay unit over on its left side. Re-install teeter bolt assembly to base through teeter mechanism.

 Note: Make sure teeter is engaged in top of slot before final tightening of teeter bolt (Fig. 2).

 Tighten teeter bolt until springs are almost fully compressed.
- 19(b). For single rear roller treadles carefully set unit up on its right side. This will have the pulley side up and expose underneath side of unit (Fig. 11). Using the 3/8" x 3 3/4" shoulder bolt and 5/16" nylock nut attach the teeter assembly to base frame (Fig 11A). Tighten using the 3/16" hex key and 9/16" open end wrench (Fig. 11B).



Fig. 7



Fig. 8



Fig. 9

20. Carefully tilt unit back to an upright position (Fig. 1).
21. For single rear roller treadles, align the treadles equally between the uprights, then tighten the (4) $\frac{3}{8}$ " x $1\frac{1}{4}$ " hex bolts on the rear roller casting to the base (Fig. 6A).
22. Re-install rear cover first, followed by the left and right drive covers and then the resistance shocks (Fig. 1).
23. Recalibrate the machine according to the Instructions in the Owner's Manual (TC3000 / TC5000 only) when complete, your Treadclimber® fitness machine should be ready to use.



Fig. 11



Fig. 11A

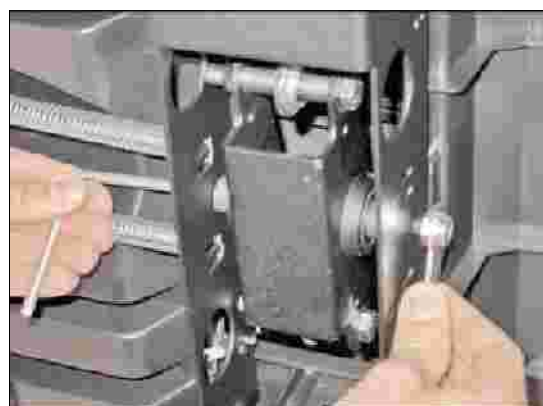


Fig. 11B

Replacing the Step Sensor

1. Unplug TreadClimber® fitness machine.
2. Gently turn TreadClimber® machine onto its right side.
3. Locate step sensor wire. (See Fig. 1)
4. Remove step sensor from bracket.
5. Disconnect the two wires.
6. Connect new step sensor.
7. Place back into bracket.
8. Make sure it is close to magnet. (Between 1/16" and 1/8")
9. Return TreadClimber® machine to upright position.

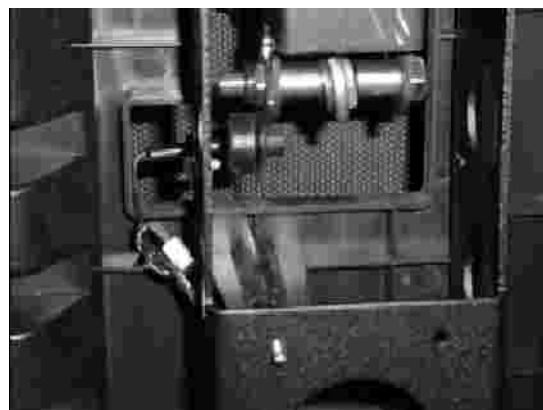


Fig. 1

Replacing the AC Inlet

1. Unplug the TreadClimber® fitness machine from the AC wall outlet
2. Wait at least 5 minutes after unplugging the machine to insure that there is no residual power to the system.
3. Remove Drive Covers from both sides of machine using a #2 Phillips head screwdriver to unscrew the 3 Phillips head screws attaching each drive cover to the base.
4. Unscrew (4) Phillips head screws and gently lift and remove the Rear Cover. (See Fig. 2)
5. Unscrew the (2) Phillips head screws and cut the wire tie, then carefully pull the AC inlet toward you so that you can see all three wires. (See Fig. 3)
6. Remove the AC Inlet from wires and set aside, out of your way.
7. Insert wires into the replacement inlet, making sure connections are correct (white = top left; black = top right; green = bottom)
8. Replace all Covers
9. Recalibrate the machine according to the instructions in the Owner's Manual (TC3000 and TC5000 only).



Fig. 2



Fig. 3

Replacing the Console Top

1. Unplug the TreadClimber® fitness machine from the AC wall outlet.
2. On the underside of the Console/Handlebar assembly, locate the 8 screws that attach the Console to the handlebar assembly (do not remove the 4 screws that attach the Console Bottom to the metal frame). (See Fig. 1)
3. Remove the 8 screws from the bottom of console and set the screws aside until you reattach the Console Top to the Console Bottom.
4. Lift the Console Top away from the Console Bottom being careful not to separate electronic wiring.
5. Carefully disconnect the white cable connector from electronics board at the bottom of the Console Top. (See Fig. 2)
6. Place the discarded Console Top aside, out of your way.
7. Gently hold the replacement Console Top upside down and carefully connect the white cable connector to the new electronics board.
8. Make sure black safety tether housing is nestled into the molded slots on bottom console (See Fig. 3).
9. Place the Safety Key into the safety keyhole on the replacement Console Bottom.
10. Carefully mount the Console Top onto the Console Bottom, making sure to keep the Safety Key in place (be very careful not to snag wires between Upper and Console Bottoms).
11. Attach the Console Top to the Console Bottom using the original 8 screws.
12. Recalibrate the machine according to the Instructions in the Owner's Manual (TC3000 and TC5000 only).



Fig. 1



Fig. 2



Fig. 3

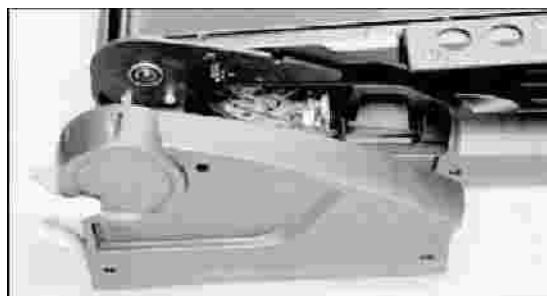


Fig. 1

Replacing the Speed Sensor

1. Unplug the TreadClimber® fitness machine from the AC wall outlet.
2. Wait at least 5 minutes after unplugging the machine to insure that there is no residual power to the system.
3. Remove Drive Covers from both sides of machine using a #2 Phillips head screwdriver to unscrew the 3 Phillips head screws attaching each drive cover to the base (See Fig. 1). Set the screws aside until Step 10.
4. Unscrew (4) Phillips head screws and gently lift and remove the Rear Cover. (See Fig. 2)
5. Stand at the back of the machine base. Locate the black wire connected to the hole in the left rear drive bracket (this wire is approximately 3 ft" long and is located below left rear roller (See Fig. 3).
6. Disconnect the white cable connector from the speed sensor wire that feeds to the long black wire (See Fig. 4 & 4A).
7. Disconnect the speed sensor from rear drive bracket.
8. Pre-install speed sensor into red cap. Speed sensor should extend through small hole inside red cap. To adjust the placement of the speed sensor use a business card or something of similar thickness. While holding the card next to the inside of the drive pulley push the speed sensor towards the card until it just makes contact. Remove the card. (See Fig. 5). Rotate the drive pulley by hand to insure pulley is not contacting speed sensor. If contact is made withdraw speed sensor just enough to prevent contact.
9. Re-connect the white cable connector to the speed sensor wire that feeds to the long black wire (See Fig. 6).
10. Replace all covers
11. Recalibrate the machine.



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

REPLACING PARTS

Replacing the Lower Console

1. Unplug machine from outlet, and wait 5 minutes to drain residual power.
2. Remove all 12 screws from underneath lower console.
3. Carefully lift upper console, being careful not to separate electronic wiring.
4. Disconnect white cable connector from electronics board.
5. Remove lower console from frame.
6. Install new lower console on frame, threading wires up through hole in center of lower console.
7. Replace 4 screws that connect lower console to metal frame.
8. Re-connect white cable connector from wiring to electronic board cable connector.
9. Place the safety key holder back in slot.
10. Carefully mount upper console onto lower console, while holding safety key in place (be careful not to snag wires between upper and lower consoles).
11. Attach upper and lower consoles with original 8 screws.
12. Recalibrate machine according to Owner's Manual Instructions.

Replacing the Console with Handlebars

1. Unplug machine from outlet
2. Wait 5 minutes after unplugging machine to ensure there is no residual power.
3. Remove 3 button head bolts attaching console to handlebars on both sides of machine.
4. With the help of another, carefully lift console out and detach cable connector running through right upright.
5. Attach cable connector from new console to the cable connector from the right upright.
6. Once the cable connection is made, slide the brackets on the handlebar into the tops of the upright tubes.
7. Attach each handlebar to the uprights using the 5/16" x 1" button head bolts (3 per handlebar)
8. Tighten the bolts using the 3/16" hex key.
9. Recalibrate machine.

Replacing the Internal Wire in the Right Upright

1. Unplug machine from outlet, and wait 5 minutes to drain residual power.
2. Remove 3 button-head bolts attaching console to handlebars on both sides of machine.
3. With the help of another, carefully lift console out and detach cable connector running through right upright.
4. Remove upright junction cover.
5. Remove 3 button-head bolts from bottom of right upright
6. Detach bottom of hydraulic cylinder from base by removing button-head bolt and washer.
7. Carefully lift upright and lay flat on covering on the floor.
8. Disconnect cable connector from bottom of right upright.
9. Remove wire from right upright by pulling from the bottom.
10. Thread new wire through right upright
11. Re-attach cable connector at base of right upright.
12. Replace right upright being careful to avoid damaging cable or cable connector.
13. Re-attach base of upright with 3 button-head bolts
14. Re-attach base of hydraulic cylinder with button-head bolt and washer.
15. Replace upright junction cover on top of right upright.
16. Attach cable connector from console to the cable connector from the right upright.
17. With the help of another, lift the console back onto both uprights, ensuring that junction covers are in place.
18. Re-attach both uprights to console using 3 button-head bolts on each side.
19. Recalibrate machine.

Replacing the Deck

1. Unplug the TreadClimber® fitness machine from the AC wall outlet.
2. Using a 3/16" Allen wrench, loosen the adjustment bolts on the front roller(s) to create slack in walking belt(s). (This will allow easy side to side movement of belt(s) to access screws on deck(s))
3. Remove plastic foot platform on side of treadle.
4. Slide walking belt to one side to expose deck screws.
5. Remove (4) deck screws and top belt guide.
6. Slide walking belt to opposite side to expose the screws on other side of deck.
7. Remove (4) remaining deck screws.
8. Slide deck out from under belt.
9. Slide new deck under belt.
10. Install (4) new screws to one side of deck.
11. Slide belt over to other side to expose other side of deck.
12. Install remaining (4) new screws.
13. Slide belt to center of deck and rollers.
14. Repeat steps 3 through 13 on the opposite side.
15. Tighten front roller bolts to tighten walking belt. (Adjust both bolts evenly to maintain belt straightness.)
16. Re-Install plastic foot platform to side of treadle. (Make sure foot platform does not sit on top of belt.)
17. Repeat steps 15 and 16 on the opposite side.
18. Check walking belts on underside of treadle to make sure there is no obstructions.
19. Plug in and run unit to ensure belt tracking and check for slipping.

Replacing the Motor Belt

1. Unplug machine from outlet.
2. Wait 5 minutes after unplugging machine to ensure there is no residual power.
3. Remove left plastic drive cover.
4. Rotate motor belt counter-clockwise, gradually easing belt off drive pulley.
5. Ease new motor belt onto drive pulley and flywheel. It may be useful to reattach the shipping bolt or gently pry the motor up with a piece of wood.
6. Once belt is tightly attached, replace left plastic drive cover.
7. Recalibrate machine.

Replacing the Hydraulic Cylinders

(Note: Hydraulic Cylinders MUST be replaced in pairs.)

1. Unplug machine from outlet.
2. Wait 5 minutes after unplugging machine to ensure there is no residual power.
3. Remove bolts and washers attaching base of hydraulic cylinders to machine base.
4. Remove bolts attaching top of cylinders from left and right uprights.
5. Install new cylinders, by attaching bolts to uprights.
6. Ease cylinders down to loop base of cylinders over metal peg on each side of base.
7. Re-install bolts and washers, attaching base of cylinders to base of machine.
8. Recalibrate machine.

If you need assistance, please have both the serial number of your machine and the date of purchase available when you contact the appropriate Nautilus office listed below.

OFFICES IN THE UNITED STATES:

E-mail: cstech@nautilus.com

- **TECHNICAL/CUSTOMER SERVICE**
Nautilus, Inc.
World Headquarters
16400 SE Nautilus Drive
Vancouver, Washington, USA 98683
Phone: 800-NAUTILUS (800-628-8458)
Email: customerservice@nautilus.com
Fax: 877-686-6466
- **CORPORATE HEADQUARTERS**
Nautilus, Inc.
World Headquarters
16400 SE Nautilus Drive
Vancouver, Washington, USA 98683
Phone: 800-NAUTILUS (800-628-8458)

INTERNATIONAL:

For technical assistance and a list of distributors in your area, please call or fax one of the following numbers.

- **INTERNATIONAL CUSTOMER SERVICE**
Nautilus International S.A.
Rue Jean Prouvé 6
1762 Givisiez / Switzerland
Tel: + 41-26-460-77-77
Fax: + 41-26-460-77-70
Email: technics@nautilus.com

BUSINESS OFFICES:

- **SWITZERLAND OFFICE**
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- **GERMANY and AUSTRIA OFFICE**
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CONTENTS

TreadClimber® FAQ's-51

Treadclimber® FAQ's

1. The red locking lever will not fully move up to treadmill mode, why?

Response: Either the shoulder bolt wasn't inserted in the teeter correctly, or the silver adjustment bolts in the back of the treadles weren't tightened fully.

2. The Treadclimber can't switch to Treadclimber or Stairclimber mode, why?

Response: Have them attempt to move the red locking lever fully in the up position. If unable to do so, the shoulder bolt most likely wasn't inserted in the teeter correctly. If certain it was inserted correctly, check to see if the silver adjustment bolts in the back of the treadles weren't tightened fully. If they were, have the customer stand on the machine to see if the treadles move up and down. If not, the Zip-Tie wasn't cut on the lower "V-shaped" brackets attaching each treadle. (TC5300/6000 send cable lock mech kit)

3. Replaced speed sensor, D light still won't blink. What should I do?

Response: Send Jumper Wire. If that doesn't resolve issue send replacement MCB.

4. Replaced step sensor, C light still won't blink. What should I do?

Response: Replace Jumper Wire. If that doesn't resolve issue, check to see if magnet on teeter is aligned with the sensor. If so, send replacement MCB.

5. The walking belts are moving backwards, why?

Response: the motor wires are most likely switched, just switch back their position.

6. The I/O cables won't connect together.

Response: Check what color the ends of the cables are. TC1000 has black connectors. TC3000-5000 has white connectors.

7. The customer states the C-light is blinking and the machine won't pass calibration, why?

Response: The jumper wires for the speed sensor and the step sensor are plugged into the motor control board incorrectly. Make sure the speed sensor wire is plugged into the pick-up marked speed, and that the step sensor wire is plugged into the pick-up marked pedal



BOWFLEX
TreadClimber

Customer Service
1.800.NAUTILUS

(800.628.8458)

www.BowflexTreadClimber.com

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