

Cybex Treadmill
Product Number 770T-CT
Owner's Manual

Cardiovascular Systems Part Number LT-22983-4 F



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## FCC Compliance Information

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

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Read all instructions and warnings before using.

## Important Voltage Information

Before plugging the power cord into an electrical outlet, verify that the voltage requirements for the site match the voltage of the treadmill that has been received. The power requirements for the Cybex 770T-CT Treadmill include a grounded, dedicated circuit, rated for one of the following:

- 100 VAC, 50/60 Hz, 20A
- 115 VAC, 60 Hz, 20A
- 208 VAC, 60 Hz, 15A
- 220 VAC, 60 Hz, 15A
- 230 VAC, 50 Hz, 13A, UK
- 240 VAC, 50 Hz, 15A

See the front warning decal for the voltage requirements of the treadmill.



WARNING: Serious injury or death can occur. To avoid injury or death the following procedure must be followed. Do not attempt to use this unit with a voltage adapter. Do not attempt to use this unit with an extension cord. Do not plug more than one unit into a single circuit. Improper connection of equipment can result in electric shock.

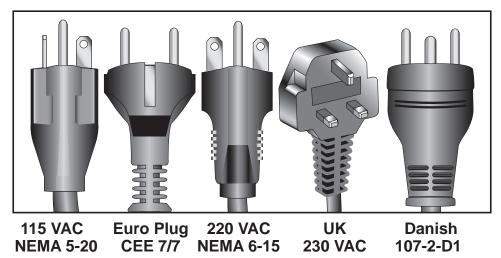
## Grounding Instructions

This treadmill must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.



DANGER: Death or serious injury can occur. To avoid death or injury the following procedure must be followed. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service provider if there is doubt as to whether the treadmill is properly grounded. Seek a qualified electrician to perform any modifications to the cord or plug. Cybex is not responsible for injuries or damages as a result of cord or plug modification.

This treadmill is for use on a grounded, dedicated circuit. Make sure that the treadmill is connected to an outlet having the same configuration as the plug. Do not use a ground plug adapter to adapt the power cord to a non-grounded outlet.



## Important Safety Instructions

(Save These Instructions)



DANGER: Death or serious injury can occur. To avoid death or injury the following procedure must be followed. Always unplug this unit from the electrical outlet before cleaning. Unplugging equipment reduces risk for shock.

#### **User Safety Precautions**

- KEEP ALL CHILDREN 12 AND UNDER AWAY! Teenagers or disabled must be supervised.
- Obtain a medical exam before beginning any exercise program.
- Stop exercising if you feel faint, dizzy, or experience pain and consult your physician.
- · Obtain instruction before using.
- 🕮 Read and understand all warnings posted on the unit before using.
- Read and understand emergency stop procedures.
- DO NOT wear loose or dangling clothing while using the treadmill.
- Keep all body parts and other items free and clear of moving parts.
- Place your feet on the two top steps when starting or stopping the treadmill.
- Use the treadmill handrails for support and to maintain balance.
- DO NOT use the unit if you exceed 400 lbs. (181 kg). This is the rated maximum user weight.
- · Report any malfunctions, damage or repairs to the facility.
- · Replace any warning labels if damaged, worn or illegible.

#### **Facility Safety Precautions**

It is the sole responsibility of the user/owner or facility operator to ensure that regular maintenance is performed.

- Enforce all user and safety precautions.
- Read and understand the Owner's Manual completely before assembling, servicing or using unit.
- Verify all users are properly trained on using the equipment.
- Do not use unit outdoors.
- Verify that each unit is setup, leveled and operated on a solid level surface. Do not install
  equipment on an uneven surface. Do not operate in recessed areas or on plush carpet.
- Verify there is enough room for safe access and operation of unit.
- Instruct all users on how to clip the e-stop clip onto their clothing and carefully test it prior to using the treadmill.
- Instruct all users to use caution when mounting and dismounting the treadmill.
- Use a dedicated line when operating the treadmill. A dedicated line requires one circuit breaker per unit.
- Connect the treadmill to a properly grounded outlet only.
- DO NOT operate electrically powered treadmills in damp or wet locations.
- Keep the running belt clean and dry at all times.
- DO NOT leave the treadmill unattended when plugged in and running. NOTE: Before leaving the
  treadmill unattended, always wait until the treadmill comes to a complete stop and is level. Then,
  turn all controls to the STOP or OFF position and remove the plug from the outlet. Remove the
  e-stop key from the treadmill.
- Immobilize the treadmill (when not in use) by removing the e-stop key.
- Inspect the treadmill for worn or loose components before each use. Do not use until worn or damaged parts are replaced.
- Stop and place the treadmill at 0 degrees incline (level) after each use.
- Maintain and replace worn parts regularly. Refer to "Preventive Maintenance" section of Owner's Manual.
- DO NOT operate the treadmill if: (1) the cord is damaged; (2) the treadmill is not working properly or (3) if the treadmill has been dropped or damaged. Seek service from a qualified technician.
- DO NOT place the cord near heated surfaces or sharp edges.
- DO NOT use the treadmill outdoors.
- DO NOT operate the treadmill around or where aerosol (spray) or where oxygen products are being used.
- Ensure all users wear proper footwear on or around all Cybex equipment.
- Disconnect power before servicing.
- DO NOT attempt repairs, electrical or mechanical. Seek qualified repair personnel when servicing. If you live in the USA, contact Cybex Customer Service at 888-462-9239. If you live outside the USA, contact Cybex Customer Service at 508-533-4300.
- Use Cybex factory parts when replacing parts on the treadmill.
- DO NOT modify the treadmill in any way.
- DO NOT use attachments unless recommended for the treadmill by Cybex.

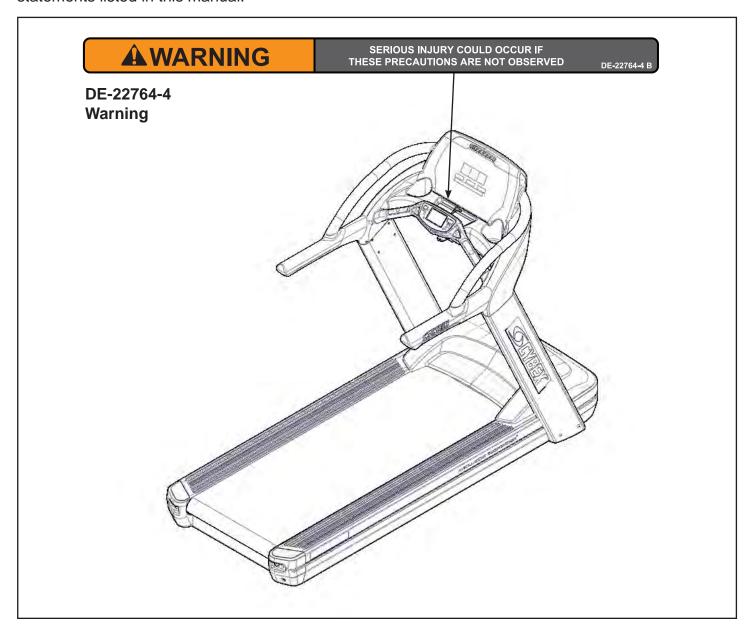
## Warning Decals

To replace any worn or damaged decals do one of the following: Visit <a href="www.cybexintl.com">www.cybexintl.com</a> to shop for parts online, fax orders to 508-533-5183 or contact Cybex Customer Service at 888-462-9239. If you are located outside of the USA, call 508-533-4300. For location or part number of labels, see the parts list and exploded-view diagram on the Cybex web site at <a href="www.cybexintl.com">www.cybexintl.com</a>.

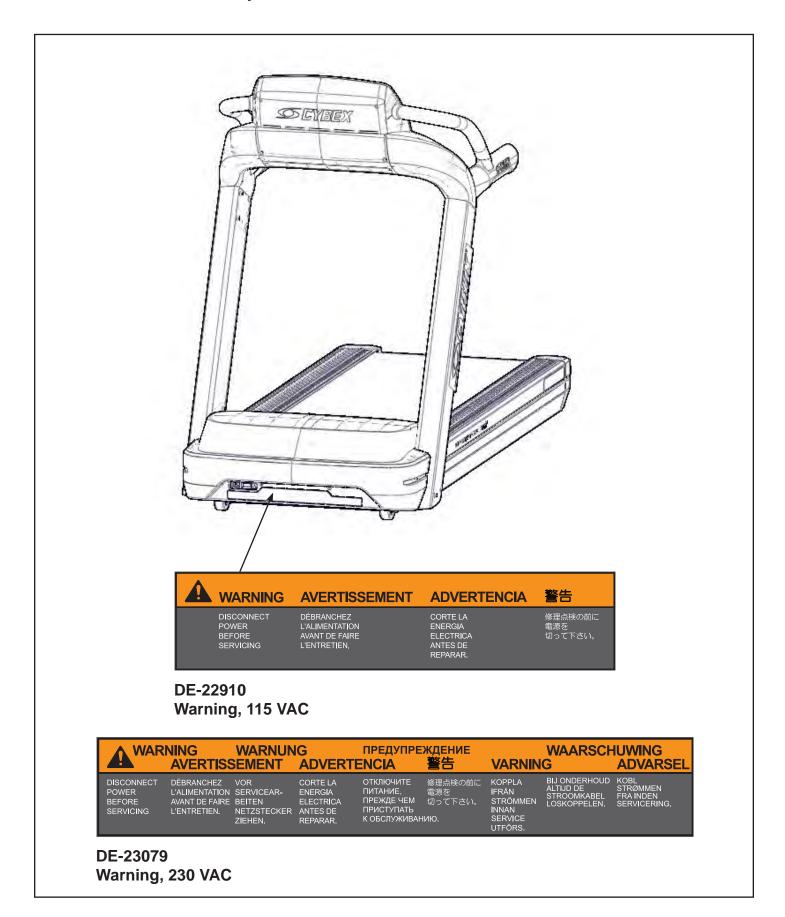
Warning decals indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.

Carefully read and understand the following caution and warning labels before using the unit.

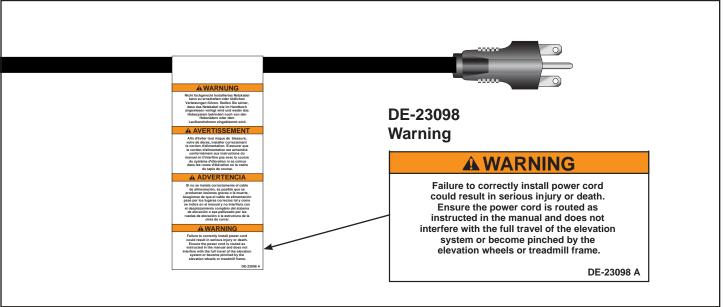
Caution decals indicate a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. There are no caution decals used on this unit. However, there are caution statements listed in this manual.







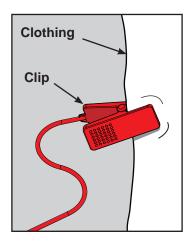




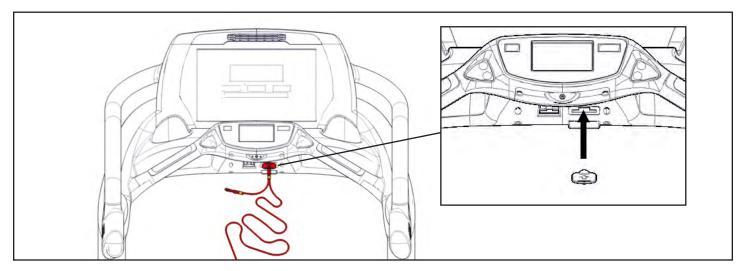
## Emergency Stop Key (e-stop)

The e-stop key functions as an emergency stop. In an emergency situation, the e-stop key disengages from the console and the treadmill will come to a stop. Before using the treadmill, clip the e-stop key as described below.

1. Compress the spring and clip the e-stop clamp to your clothing. Ensure the clip engages enough clothing so it does not fall off in an emergency situation. Be sure the string is free of knots and has enough slack for you to workout comfortably with the e-stop key in place.



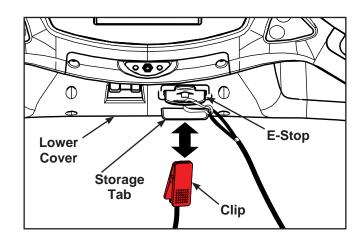
2. Without falling off the treadmill, carefully step backward until the e-stop pulls out of the console. If the e-stop clip falls off your clothing then the test has failed. Reclip the e-stop clip to your clothing and repeat this step.



- **3.** Replace the e-stop key. The treadmill is now ready to be used. Ensure the the e-stop clip is secured to your clothing at all times during use.
- **4.** Remove the e-stop key from the treadmill after use.

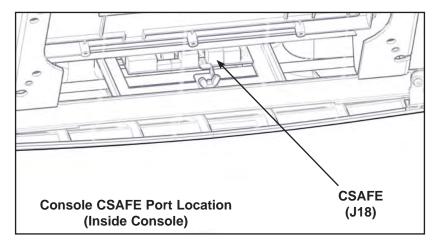
The e-stop key can be removed to help prevent unauthorized use. Refer to the Stopping the Treadmill section in the Operation chapter for more information about the e-stop key.

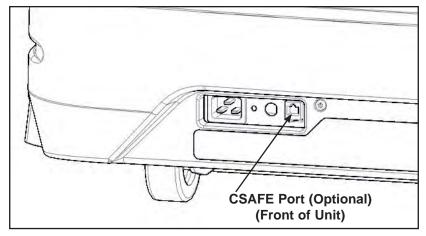
When not in use store the e-stop clip on the storage tab located on the lower cover.



## **CSAFE Port**

The CSAFE standard defines a communication protocol and low-voltage DC power source specific to the Fitness Equipment Industry. These RJ-45 phone jacks are provided for use ONLY within the CSAFE protocol. For more information on CSAFE standard, visit www.fitlinxx.com/csafe.





# Assembly

## **Specifications**

Length: 84" (213 cm). Width: 35.6" (90.5 cm).

Running Area: 22" x 60" (56 cm x 152 cm).

Weight of Product: 410 lbs. (186 kg). Shipping Weight 440 lbs. (200 kg).

Speed Range: 0.5 to 12.4 mph (0.8 to 20.0 kph) in 0.1 mph or 0.1 kph increments.

Incline Range: 0 to 15% grade.

Manual Mode: Yes.

Programs: Quick Start, Manual, and 9 standard programs with user orientated goal

(Time, Distance or Calories). Advanced programming includes, Gerkin

protocol, and all Military Protocols including the PEB for Federal.

Standard Features: Safety Sentry™, Contact Heart Rate, Polar® wireless heart rate (chest strap

not included), CSAFE, frame color choices include white texture, black

texture, metaltone gold, black chrome and platinum sparkle.

Optional Features: Unlimited custom colors available.

Power Requirement: Grounded, single phase, dedicated line (discreet power and return for each

circuit) and one of the following:

• 100 VAC, 50/60 Hz, 20A • 208 VAC, 60 Hz, 15A • 220 VAC, 60 Hz, 15A

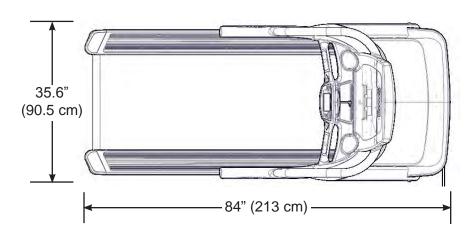
230 VAC, 50 Hz, 13A, UK
 240 VAC, 50 Hz, 15A

Motor: 3.0 hp Continuous, 5.0 hp Peak, AC, Brushless.

Emergency Stop: Pull the emergency stop key (e-stop).

Maximum User Weight: 400 lbs. (181 kg).

Options: Embedded A/V channel and volume controls and video mount bracket.



## **Environment and Storage**

#### **Humidity and Static Electricity**

The unit is designed to function normally in an environment with a relative humidity range of 30% to 75%. The unit can be shipped and stored in a relative humidity range of 10% to 90%.

Dry air may cause static electricity. During workout, user may experience a shock due to build-up of static electricity on the body and the discharge path of the unit. If static electricity is experienced, increase humidity to a comfortable level through the use of a humidifier.

Do not install, use, or store the unit in an area of high humidity, such as in the vicinity of a steam room, sauna, indoor pool or outdoors. Exposure to extensive water vapor, chlorine and/or bromine could adversely affect the electronics as well as other parts of the unit.

#### **Temperature**

The unit is designed to function normally in an environment with an ambient temperature range of 50° F (10° C) to 104° F (40° C). The unit can be shipped and stored in an environment with an ambient temperature range of 32° F (0° C) to 140° F (60° C).

## Warning and Caution Decals

Read and understand all warnings and cautions listed in Safety Section before assembling unit.



**ACAUTION:** Serious injury or damage to machine can occur. To avoid injury or damage the following procedure must be followed. A minimum of two people are required to lift, move and assemble this unit. Always use proper lifting methods when moving heavy items.

Ensure all electrical requirements are met as indicated in the specifications in the Safety Section and as listed in this chapter.

# Choosing and Preparing a Site

Before assembling the treadmill a suitable site must be selected with the proper electrical outlet power available for optimum operation and safety. See the *Electrical Power Requirements* section (located on the next page) for direction in locating the treadmill's voltage requirements.

The area selected for the treadmill should be well lit and well ventilated. Place the treadmill on a structurally sound and level surface (do not place in recessed areas or on plush carpet) a few feet away from walls and other equipment. Each side of the treadmill should have a 19.7" (0.5 m) minimum space. Behind the treadmill should be 79" (2.0 m) minimum of space. Allow enough clearance for safe access and passage during use of the machine. If the treadmill is to be located above the first floor, place it near or above major support beams. If the area has a heavy, plush carpet, the airflow around the base of the machine may be restricted or the carpeting may interfere with the moving parts. To protect the carpeting and the machinery, place a 3/4" (1.9 cm) thick wood base under the treadmill.

Do not install the treadmill in an area of high humidity, such as in the vicinity of a steam room, sauna, indoor pool, or outdoors. Exposure to extensive water vapor, chlorine, and/or bromine could adversely affect the electronics as well as other parts of the machine.

### Electrical Power Requirements

The power requirements for this treadmill are a grounded, dedicated circuit rated for one of the following:

- 100 VAC, 50/60 Hz, 20A
- 115 VAC, 60 Hz, 20A
- 208 VAC, 60 Hz, 15A
- 220 VAC, 60 Hz, 15A
- 230 VAC, 50 Hz, 13A, UK
- 240 VAC, 50 Hz, 15A

Contact a qualified electrician to ensure the power supply complies with local building codes.

Do not use a ground plug adapter to adapt the 3-prong power cord plug to a non-grounded electrical outlet. Do not use an extension cord.

## 770T-CT Assembly

The words "left" and "right" denote the treadmill user's orientation.

Read and understand all instructions thoroughly before assembling the treadmill.

#### Verify you have received the correct package.

- 1. Read box label to verify the model number and voltage (optional) match what was ordered.
- 2. Lift and remove cardboard sleeve surrounding unit.
- **3.** Verify paint color matches what was ordered.

#### **Tools Required**

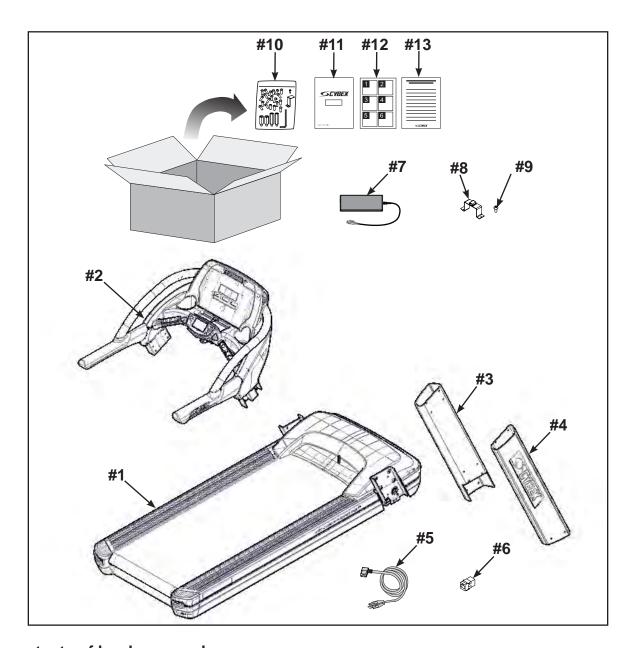
- Phillips screwdriver
- Long 3/8" drive socket extension
- 3/4" Open end wrench
- 7/32" Allen wrench (included)
- 14 mm Open end wrench

Two people will be required for this procedure. It is the responsibility of the facility owner/owner of the equipment to ensure that there is appropriate clearance around each machine to allow for safe use and passage.

# Unpack and verify the contents of the boxes.

See content listing and diagram below for carton contents. See *Customer Service* for contact information if any parts are missing.

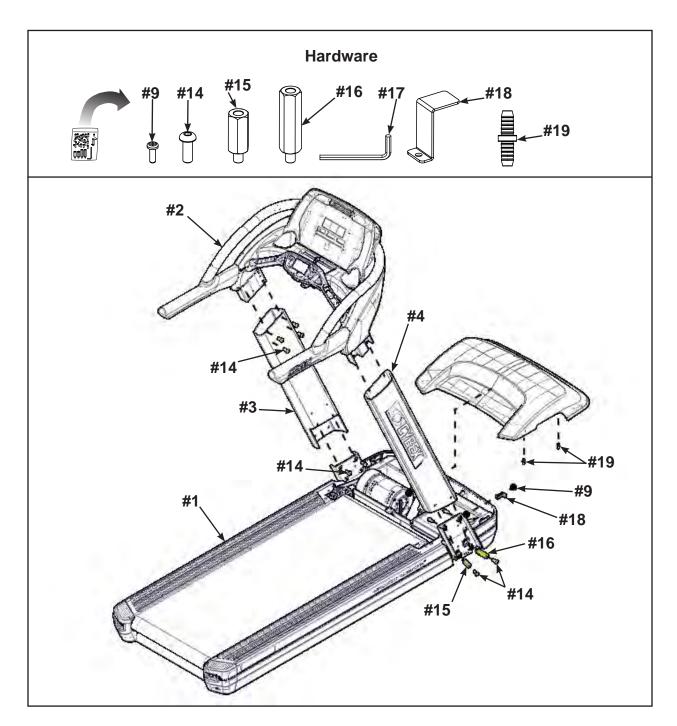
Item	Quantity	Part Number	Description
1	1	Varies	Base assembly
2	1	Varies	Console assembly
3	1	FM-22900	Upright, Left
4	1	FM-22901	Upright, Right
5	1	Varies	Power Cord
6	1	CN-22747	CSAFE Coupler (optional)
7	1	Varies	Power Supply
8	2	FS-23044	Clamp
9	2	HS-21672	Screw, #8-32 x 1/2"
10	1	AX-23019	Hardware pack
11	1	LT-22983-4	Owner's Manual
12	1	LT-22984	Assembly poster
13	1	LT-23016-4	Warranty sheet



# Verify contents of hardware pack

See hardware pack listings and hardware pack contents. See *Customer Service* for contact information if any parts are missing.

Item	Quantity	Part Number	Description
9	1	HS-21672	Screw, #8-32 x 1/2"
14	20	HS-22651	Bolt, 3/8-16 .75", BHCS, ZN
15	2	FM-22778	Standoff, M-F, 3/8-16" Thread, Short
16	2	FM-22779	Standoff, M-F, 3/8-16" Thread, Long
17	1	HX-00440	Allen wrench, 7/32"
18	1	FS-23071	Bracket, Power Cord
19	4	HX-21519	Connector, Plastic



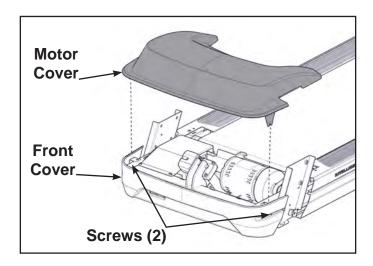
#### Lift and move the treadmill.

Take note of doorway widths in facility before assembly. The base is 32.5" (83 cm) wide. With uprights installed the width is 35.6" (90.5 cm).

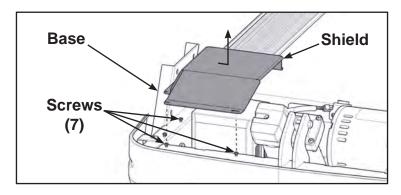
At least two people should lift and move the treadmill to a level location where you intend to leave it. Use proper lifting methods.

#### Remove shield.

1. Loosen but do not remove the two front cover screws securing the motor cover using a Phillips screwdriver.



- 2. Remove motor cover by lifting vertically.
- 3. Loosen but do not remove the seven screws securing the sheild to the base using a Phillips screwdriver.



4. Remove shield by sliding sideways and then vertically off of base.

#### Install power cord.

Decide whether you will plug the power cord into a power outlet near the front of the treadmill or the back of the treadmill. Follow the corresponding routing procedure below. Do not plug the power cord into a power outlet at this time.



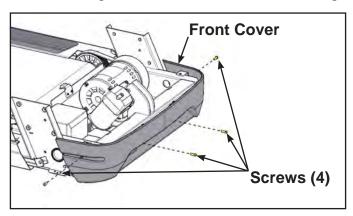
**WARNING:** Serious injury or death can occur. To avoid injury or death the following procedure must be followed. Failure to correctly install power cord could result in serious injury or death. Ensure the power cord is routed as instructed and does not interfere with the full travel of the elevation system or become pinched by the elevation wheels or treadmill frame.

Front routing: Skip to page 25, section "Install the uprights".

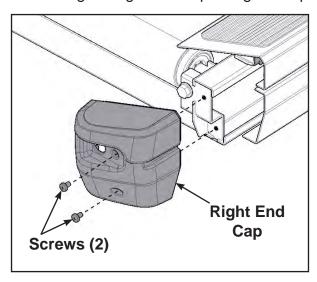
## **Back routing:**

#### Remove front cover.

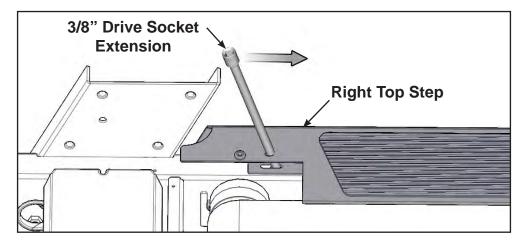
1. Remove the four screws securing the front cover to the base using a Philips screwdriver.



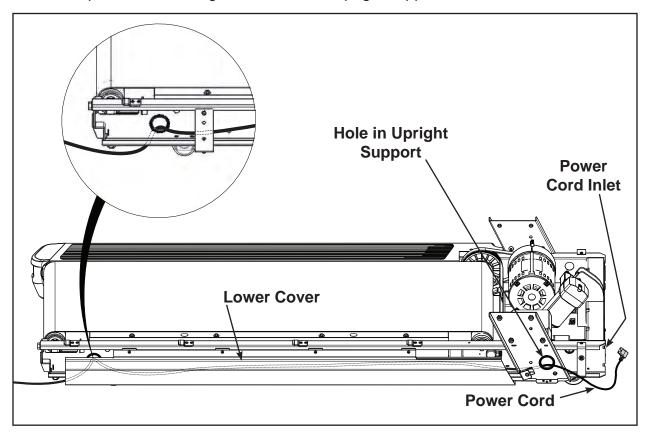
- 2. Remove front cover.
- 3. Remove the two screws securing the right end cap using a Philips screwdriver.



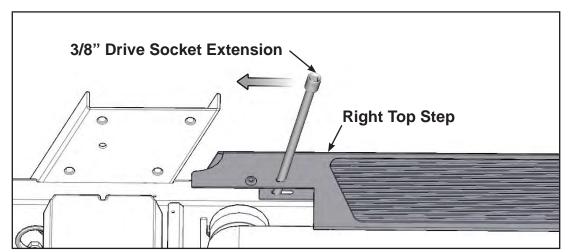
**4.** Remove the right top step by inserting a long 3/8" drive socket extension into the right top step and prying backwards.



- **5.** Remove the right top step.
- **6.** Route the power cord through the hole in the upright support and behind the lower cover.



- **7.** Adjust the power cord length entering the frame to allow for the power cord to be plugged into the power cord inlet. Do not plug the power cord in at this time.
- **8.** Adjust the power cord length exiting the rear of the frame. Store extra power cord behind lower cover.
- **9.** Install the right top step by placing in position and inserting a long 3/8" drive socket extension into the right top step.

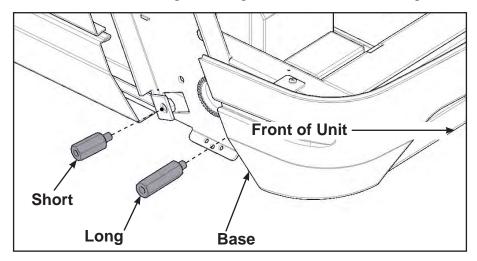


**10.** Pry the long 3/8" drive socket extension forwards to secure the right top step.

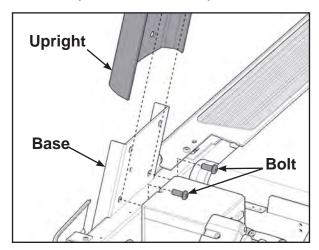
11. Install the two screws securing the right end cap using a Philips screwdriver.

#### Install the uprights.

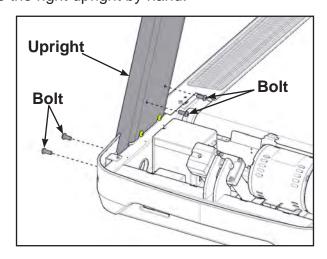
1. Secure the standoffs short and long to the right side of the base using a 3/4" open end wrench.



2. Thread two bolts into the base by hand. Do not fully thread bolts into the base.



- 3. Place the right upright onto the base assembly and the bolts installed in the previous step.
- **4.** Thread four bolts into the right upright by hand.

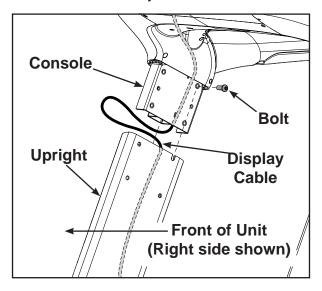


5. Repeat steps 1 through 4 for the left upright.

#### Install the console assembly to the uprights.

If unit includes optional A/V or CSAFE cables, follow same display cable procedure.

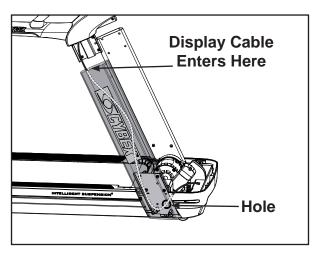
**1.** Thread one bolt, into the top back hole for each side of the console assembly by hand. Do not fully thread bolts into the console assembly.



Do not pinch or damage display cable when installing console assembly.

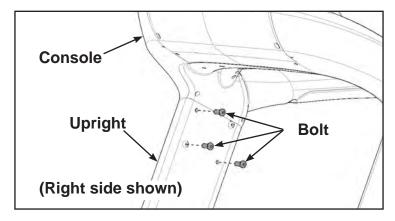
Two people are required for the following two steps.

2. Insert the display cable into the top of the right upright until it exits the hole at the base of the right upright.



**3.** Place the console assembly in position on the bolts installed in step 1 in the left and right uprights.

**4.** Thread six bolts, into the remaining holes of the right upright and left upright.

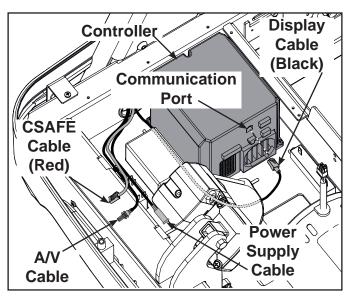


**5.** Tighten all of the bolts using the 7/32" Allen wrench.

#### **Connect the Display Cable.**

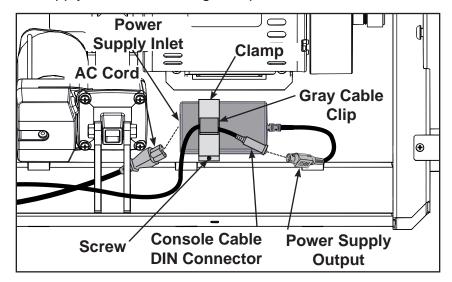
The display cable and CSAFE cable have the same connectors. The display cable is black, the CSAFE cable is red.

- 1. Route the cables under all other cables and towards the base plate.
- 2. Plug the display cable, located at the bottom of the upright assembly into the communication port of the controller.



#### Install the Power Supply.

**3.** Install the power supply to the base using clamp and screw.

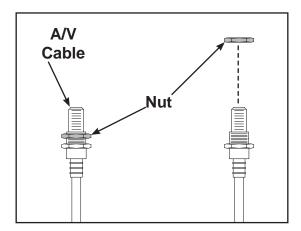


- 4. Plug the AC cord into the power supply inlet.
- **5.** Route console cable through the gray cable clip.
- **6.** Connect the console cable's DIN connector to the power supply output. Make sure the two connectors snap firmly together and can not be pulled apart without pulling the sleeve back to release it.

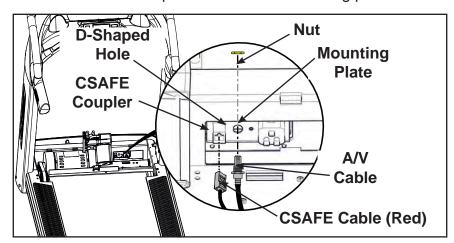
#### Install optional A/V or CSAFE cables.

The 770T-CT may have A/V or CSAFE cables depending on configuration.

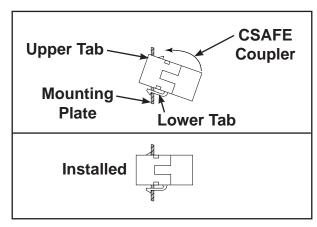
1. Unthread the nut at the end of the A/V cable.



2. Insert the A/V cable into the D-shaped hole into the mounting plate on the front of the unit.



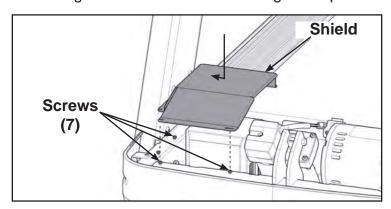
- 3. Thread the nut removed in step 2 onto the A/V cable by hand.
- **4.** Install the A/V cable to the mounting plate on the front of the unit using a 14 mm open end wrench.
- **5.** Insert the optional CSAFE coupler into the mounting plate by hooking the lower tab into the mounting plate and snapping in the upper tab.



**6.** Plug the red CSAFE cable into the CSAFE coupler on the front of the unit.

#### Install shield.

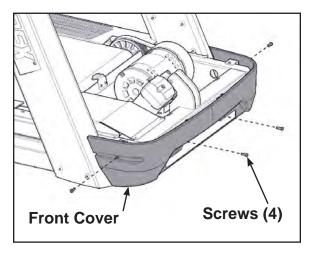
Tighten the seven screws securing the shield to the base using a Philips screwdriver.



#### Attach the front covers.

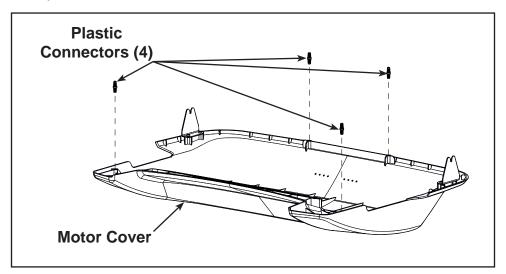
Perform steps 1 and 2 if you removed the front cover. If not, skip to step 3.

**1.** Install, but do not fully tighten the four screws securing the front cover to the base using a Philips screwdriver.

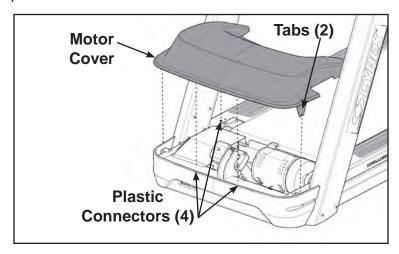


Do not scratch top of hood cover. Place on carpeting or other soft surface.

2. Insert the four plastic connectors into the motor cover.



**3.** Place the motor cover into position vertically by aligning the two tabs and four plastic connectors. Two plastic connectors are mounted in the front cover and two in the motor cover.

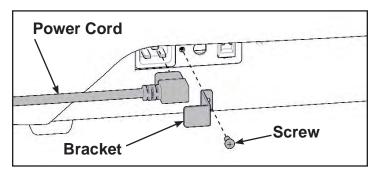


If motor cover top does not fit properly, loosen the side screws on the front cover as needed.

**4.** Tighten the four front cover screws using a Phillips screwdriver. Be sure the screws are securing the motor cover's tabs.

#### Install power cord.

Install the power cord with the mounting bracket and mounting screw using a Phillips screwdriver.

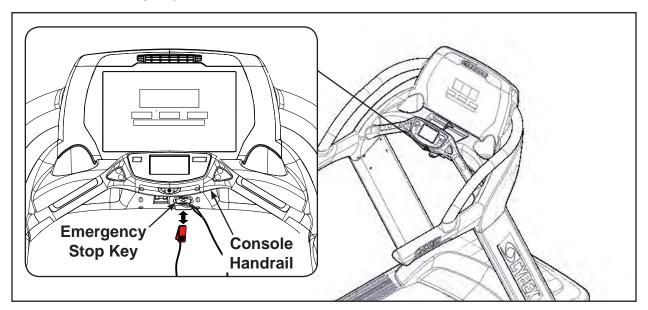


#### Level the treadmill.

Confirm that the treadmill is on a level surface.

#### Attach emergency stop key.

Confirm that the emergency stop key is in place in the bottom of the console handrail. The treadmill will not run without the key in place.



When not in use store the e-stop clip on the storage tab located under the console handrail.

#### Visually inspect the treadmill.

Examine the treadmill to ensure that the assembly is correct and complete.



Use the following instructions to setup the units settings.



CAUTION: Serious injury or damage to machine can occur. To avoid injury or damage the following procedure must be followed. During this procedure STAY OFF THE RUNNING BELT! Stand with your feet on the two steps.

1. Plug the power cord into a power outlet from a grounded, dedicated circuit as described under Electrical Requirements in this chapter.

Ensure the power cord is not being pinched under the front of the treadmill.

2. Toggle the on/off (I/O) power switch under the front end of the treadmill to the on position (I). The control panel will light up and be in the Dormant Mode.

#### Initial setup

Initial setup only occurs during the installation of the unit. Once complete, refer to Setup Options below.

- 1. Press the Cybex logo icon options. to display the Access Toolbox and Lock Screen
- 2. Press the Access Toolbox icon to display the *Access to Toolbox* login screen.
- **4.** Press the Setup icon to display the *setup menu*.
- **5.** Tap the **Time** icon to advance to the *Set the Time* screen.
- **6.** Adjust the time if needed, then tap the **ENTER** icon
- 7. Tap the **Date** icon to advance to the *Set the Date* screen.
- 8. Adjust the date if needed, then tap the ENTER icon
- **9.** Tap the **Units & Power** icon to select the Set units preference screen.
- **10.** Select the unit preferences from the following options:

Record your actual line voltage here. Line frequency is usually specific to your country or location.

Distance Units	Weight Units	Line Frequency	Line Voltage
Miles	Lbs.	50 Hz	110v
Km	Kg	60 Hz	115v
	Stone		208v
			220v
			230v
			240v

Exit Set Up Mode by tapping the **Toolbox** icon **Solution**, then tap the **Home** icon **Column**. The screen will refresh.

#### **Setup options**

Enter setup options.

- 1. Press the Cybex logo icon options. to display the Access Toolbox and Lock Screen
- 2. Press the Access Toolbox icon to display the Access to Toolbox login screen.
- 3. Enter the sequence:
- **4.** Press the Setup icon to display the setup menu.

#### The Setup options are:

Time and Date	See Initial setup above
Units and Power	See Initial setup above
Workout times	Set Default and Max time
Limits	Set minimum speed, maximum speed and maximum incline
Language	Select language to use for CardioTouch text

#### Exit Set Up Mode.

Exit Set Up Mode by tapping the **Toolbox** icon , then tap the **Home** icon . The screen will refresh.

Your treadmill is now ready for use. Proceed to Testing the Treadmill Operation. Follow the instructions in the Operation chapter to learn how to operate the treadmill. You should begin with walking speeds first, to be sure everything is functioning properly.



WARNING: Serious injury or death can occur. To avoid injury or death the following procedure must be followed. Be sure that all electrical requirements are met as indicated in the specifications at the front of the manual and at the beginning of this chapter prior to proceeding.

## **Testing Operation**

Use the following instructions to test the full speed and incline range of the treadmill and to check the belt for proper operation.



**CAUTION:** Serious injury or damage to machine can occur. To avoid injury or damage the following procedure must be followed. During this procedure STAY OFF THE RUNNING BELT! Stand with your feet on the two steps.

1. Plug the power cord into a power outlet from a grounded, dedicated circuit as described under Electrical Requirements in this chapter without anyone on the treadmill.

Ensure the power cord is not being pinched under the front of the treadmill.

- 2. Toggle the on/off (I/O) power switch under the front end of the treadmill to the on position (I). The control panel will light up and be in the opening screen.
- 3. Press the Quick Start key. The treadmill begins a countdown "3...2...1" and sounds a tone for each count. After it reaches one (1), the treadmill gives a longer tone and then begins accelerating the belt to reach 0.5 mph (0.8 kph). The lower left display will show the incline and the lower right display will show the actual speed.
- 4. Press and hold down the **Speed** + key until the treadmill reaches a speed of approximately 4 mph (6.4 kph), as indicated on the display.

Observe the belt to see that it is running properly; it should stay centered in the middle of the deck. If you have problems with the running belt operation, see Running Belt Adjustments in the Maintenance chapter.

5. Run the treadmill through its full speed range. First press the **Speed +** key until the treadmill reaches its highest speed. Then press the **Speed -** key until the treadmill is back to 0.5 mph (0.8 kph).

Pressing the Incline ▲ ▼ or Speed + - keys will show the actual incline or speed on the displays.

When the treadmill reaches the set incline and speed, the displays will remain steadily illuminated to indicate that the desired settings have been reached.

- 6. Run the treadmill through its full % grade range. Press the **Incline** ▲ key until the treadmill reaches its highest grade (15%). Then press the **Incline** ▼ key until the treadmill reaches 0% grade.
- 7. Press the **Stop** key once to stop the running belt and enter *Review Mode*. Press the **Stop** key again to exit Review Mode and return the display to the opening screen.



#### Intended Use

Intended use of this exercise equipment is to aid or improve general physical fitness and exercise.

#### Terms Used

This section lists some of the common terms and symbols used in this chapter. Other terms and symbols are listed in this chapter as appropriate. For setup options see Setup in the Assembly and Setup chapter.

**Active Mode** — Active Mode is when the running belt is moving. Before Active Mode begins, a three second countdown and "3...2...1" is displayed. Active Mode continues until the preset time limit is reached, the e-stop key is pulled out or the **STOP** key is pressed.

**CardioTouch Screen** — The CardioTouch Screen is the touch screen located in the handset area.

**Cool Down** — This begins at the end of a programmed workout. The countdown timer is set to two minutes, elevation returns to 0% and speed is reduced to 50% of the MET level or 2.5 MPH (4 Km/H) whichever is lower.

The last two minutes of a Programs (P1 - P9) will reduce the incline to 0% and the speed to half of the MET level for each of the two remaining minutes. Cool down will also be active when Manual or Quick Start workouts end due to the set or max time.

**Dormant Mode** — This occurs when the treadmill is powered up and not in use. Dormant Mode settings are adjusted in Setup.

**Manual Mode** — In this active mode the user sets a goal for Time, Distance or Calorie. The user enters *Weight* before entering *Active Mode*. The user controls speed and incline. *Manual Mode* continues until the goal is reached.

**Program Group** — This begins after tapping the **Programs** icon. Select from **Programs**, **Advanced Programs**, **Guide Me** or **Custom Programs**.

**Quick Start** — This begins by tapping the **Quick Start** icon. *Quick Start* enters *Active Mode* at minimum speed and 0% elevation with time counting up from 0:00.

**Review Mode** — This begins after pressing the **Stop** key once or at the end of a program or when the treadmill detects that the user is not there (see *Safety Sentry*  $^{TM}$  in this chapter). The workout data, any test results and the success of recording the workout to Nike+ will display for the preset review time.

**Wake-up Mode** — This occurs when motion is detected or a key is pressed. A tone will be heard.

# User Control Symbols Used



Control	Control Name	Description
	INCLINE UP	Adjust Incline up.
	INCLINE DOWN	Adjust Incline down.
+	SPEED UP	Adjust <b>Speed</b> up.
	SPEED DOWN	Adjust <b>Speed</b> down.
	VOLUME UP	Adjust <b>Volume</b> up.
	VOLUME DOWN	Adjust <b>Volume</b> down.
<b>₩</b>	CHANNEL/TRACK CONTROL	iPod - <b>NEXT</b> track A/V - Channel <b>UP</b>
K	CHANNEL/TRACK CONTROL	iPod - <b>PREVIOUS</b> track A/V - Channel <b>DOWN</b>
STOP	STOP	Press <b>Stop</b> once to end the workout session and start the <i>Workout Review</i> . Press <b>Stop</b> again to exit to <i>Dormant Mode</i> .
<b>S</b>	FAN	Default speed is <b>OFF</b> during active mode. Press the <b>FAN</b> key to control fan speed. Choices are OFF, LOW and HI.

# CardioTouch Symbols Used

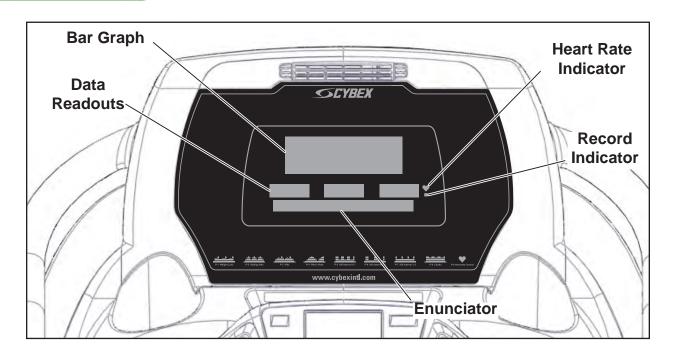


Icon	Icon Name	Description
MANUAL	MANUAL	In this active mode the user sets a goal for Time, Distance or Calorie. The user can enter <i>Weight</i> before entering <i>Active Mode</i> . The user controls speed and incline. <i>Manual Mode</i> continues until the goal is reached.
QUICK START	QUICK START	Quick Start enters Active Mode at minimum speed and 0% elevation with time counting up from 0:00.
PROGRAMS	PROGRAMS	Tap <i>Programs</i> icon to enter program group selection.
O	iPOD	Tap <i>iPod</i> icon to enter iPod control menu. If iPod is not connected, icon will be grayed out.
	HOME	Return to opening screen.
START	START	Enter Active Mode.
	BACK	Return to previous or opening screen.
	UP LEVEL	Go up one level or return to iPod screen.
	SHIFT LEFT	Shift the screen left to view more options.
	SHIFT RIGHT	Shift the screen right to view more options.

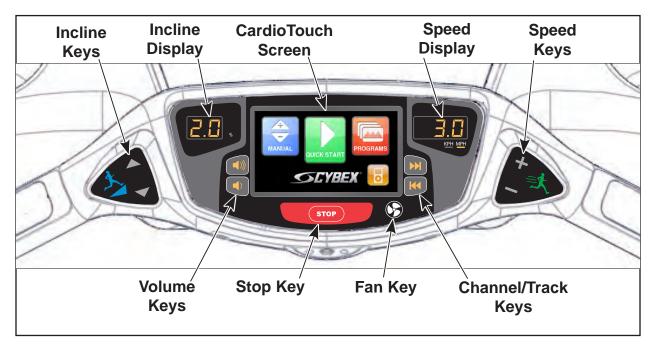
# CardioTouch Symbols Used (continued)

Icon	Icon Name	Description
1 2 3 4 5 6 7 8 9 0 4	KEYPAD	Numeric keypad for entering data.
	ENTER	Select after entering information to enter value.
	CLEAR	Clear any values selected.
i	INFO	Select to provide more information and details.
10	SCALE	Displays current value and high/low range.
<b>SCYBEX</b> ®	CYBEX LOGO	Tap Cybex logo to access <i>Screen Lock</i> and <i>Toolbox</i> . See Preventive Maintenance section.

# Console Display



## CardioTouch Screen and User Controls



**Displays** — Incline and Speed are shown in the LED displays.

Keys — User controls for Incline, Speed, Volume, Stop, Fan and Channel/Track.

CardioTouch Screen — Tap the icons to make selections.



## **Quick Operation Guide**

Maximum user weight is 400 lbs. (181 kg).

The following is a quick overview of the operation of the treadmill. For more information read *Detailed Operation Guide* in this chapter.

1. Place your feet on the two top steps located on each side of the running belt.



**WARNING:** Do not stand on the running belt when starting the treadmill. Always place your feet on the two top steps when beginning a workout.

- **2.** Clip the e-stop clip onto your clothing and test it as described under *Emergency Stop* in the *Safety* chapter.
- 3. Tap QUICK START on the CardioTouch screen.



The treadmill begins a countdown, "3...2...1," after which it accelerates the belt to 0.5 mph (0.8 kph) and enters Active Mode.



- **4.** Hold the handrails while you step onto the running belt and begin walking.
- **5.** Press the **Speed +** keys to change the belt speed at any time. The right display will show the current speed.
- **6.** Press the **Incline** ▲ ▼ keys to change the incline at any time. The left display will show incline.
- **7.** Press the **Stop** key at any time to stop the running belt. "Workout Review" is displayed and the incline returns to 0%.

## **Detailed Operation Guide**

Maximum user weight is 400 lbs. (181 kg).

- 1. Plug the treadmill power cord into a power outlet from a grounded, single phase, dedicated circuit, rated for one of the following:
- 100 VAC, 50/60 Hz, 20A
- 115 VAC, 60 Hz, 20A
- 208 VAC, 60 Hz, 15A
- 220 VAC, 60 Hz, 15A
- 230 VAC, 50 Hz, 13A, UK
- 240 VAC, 50 Hz, 15A
  - 2. Set the on/off switch to the on position.



WARNING: Do not stand on the running belt when starting the treadmill. Always place your feet on the two top steps when beginning a workout.

- 3. Place your feet on the two top steps located on each side of the running belt.
- 4. Clip the e-stop clip onto your clothing and carefully test the e-stop key to ensure it will activate in case of an emergency. See Emergency Stop Key (e-stop) in the Safety Chapter for properly testing the e-stop key. Also, see Stopping the Treadmill in this chapter for further information about the e-stop key. Be sure the string is free of knots and has enough slack for you to run comfortably with the e-stop key in place.
- **5.** At the opening screen select Manual, Quick Start or Programs.

If Manual Mode is selected, choose a Time, Distance or Calorie Goal. Enter goal value by tapping the keypad and then the **Enter** icon. The range of values are displayed on the **Scale**.



To select a program category, tap one of the program category icons from the program options screen.



To select a program, tap one of the program icons from the programs screen.



Upon entering a program the display will guide you through the appropriate settings. This is referred to as Program Setup Mode. If the **Start** key is pressed now, all defaults for that program will be accepted. After 10 seconds, if no key has been pressed, the first default will be accepted. After another 10 seconds the second default will be accepted and so on until the last default. The program will not enter Active Mode until you press the **Start** key. If no key has been pressed for 60 seconds after displaying the last default, then the treadmill will return to the Dormant Mode.



For the most accurate calorie count, you must set your correct weight before beginning your workout (including clothing).

When selecting a program you must tap the **Enter** icon after each adjustment of *Time*, *Level* or *Weight*.

**6.** Press the **Start** key.

The treadmill begins a countdown, "3...2...1" and sounds a tone for each count. When it reaches one (1) the treadmill gives a longer tone and then starts accelerating the belt. In *Manual Mode* the belt will begin accelerating to 0.5 mph (0.8 kph) and the incline will remain at zero percent. In a program the belt will begin accelerating and the incline will change to the corresponding speed and incline of the program and level you selected.



- 7. Hold the handrails while you step onto the running belt and begin walking.
- **8.** Observe the control panel. The top center *Bar Graph* display shows a graphical representation of the relative incline changes, and if in a program, will show the relative intensity changes that are coming up. The *Text Area* will start showing the workout data such as Distance, Calories, Heart rate (if available), METs and Pace (Minutes per Mile or Minutes per Km). The data displays will start by automatically shifting every 5 seconds.

Heart rate will be displayed in lieu of METs if a valid heart rate is available from a wireless chest strap (not included) or by holding the contact heart rate grips.

When you adjust incline in a program, the change will affect only the current segment. The program control will resume starting with the next segment. To increase or decrease overall intensity, adjust the speed and/or the program level.

- 9. Press the **Speed +** keys to change the belt speed at any time. The right display will show the set speed.
- **10.** Press the **Incline** ▲ ▼ keys to change the incline at any time. The left display will show the current incline only when incline keys are used, then revert to time.
- **11.** Press the **Stop** key at any time to stop the workout. "Workout Review" is displayed and the incline returns to 0%.



If the e-stop key is removed during a workout, the drive motor power shuts off immediately, causing the belt to stop. "Emergency Stop – Key" is displayed. Replacement of the e-stop key causes *Workout Review* to begin.

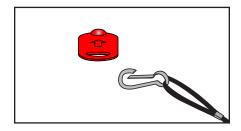
When a program is complete the treadmill begins a countdown, "3...2...1" and sounds a tone for each count. The belt slows to a stop, the incline returns to 0% and Workout Review is displayed for the preset time or until you press the **Home** key.

The treadmill returns to Dormant Mode.

## Stopping the Treadmill

Press **Stop** once to end the workout session and start the Workout Review. The treadmill will perform a controlled belt stop and bring the incline to 0%. The Text Area will be displaying accumulated data or the results of the Fitness Test for the duration configured in Setup for Review Time. Press **Stop** again to exit to Dormant.

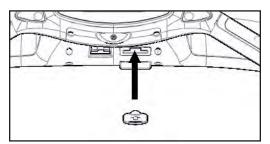
The function of the immobilization method: The purpose of immobilizing the treadmill is to prevent unauthorized use. This can be accomplished by removing the e-stop key from the treadmill, unclipping it from the cord and putting it in a non-accessible place. Immobilization can also be enabled using the *LOCK* code. Either temporarily by pressing *LOCK* during review and entering the correct *PIN* number, or permanently by enabling the *LOCK* feature in *SETUP* mode.



**The emergency dismount:** Follow the steps listed below if you experience pain, feel faint or need to stop your treadmill in an emergency situation:

- **1.** Grip handrails for support.
- **2.** Step onto the top steps.
- **3.** Pull the e-stop key off the console.

The function of the emergency stop: The e-stop key functions as the emergency stop. In an emergency situation, remove the e-stop key from the treadmill and the running belt will come to a stop.



## Safety Sentry

If you step off of your treadmill during a workout, it is designed to detect your absence and will stop the belt. Before taking action, the display will beep twice and display "Touch the screen to continue" on the text area. If no response in 20 seconds, it will proceed to exiting *Active Mode* and then *Review*.

The treadmill will use every sensor available to determine a user is still on the belt before asking if you are present, then shutting it off. If the user is lighter than 100 lbs. (45 Kg), the motor drive may not be able to determine they are on the belt. In this instance, the treadmill can only rely on the motion sensor, key inputs, or the heart rate to establish your presence. It is advisable for lighter users to stay within the 'sight' of the motion sensor (no further back than the end of the handrails) or take advantage of the wireless heart rate feature to avoid triggering the Safety Sentry.

## **Program Selection**



WARNING: Obtain a medical exam before beginning any exercise program. Begin comfortably with a lower level and progress with higher levels as you become acclimated.

With the 770T-CT, you may choose from Quick Start Manual Mode, nine program choices, eight fitness tests, and custom programs entered via USB.

#### **Manual Choices:**

 Quick Start Press Quick Start. Control speed and elevation.

Set a goal, Time, Distance or Calorie. Enter weight. Control speed and elevation. Manual Mode

#### **Program Choices:**

No.	Name	Levels	Data Entries/Selections
P-1	Weight Loss	10 levels.	Set a goal, enter level and weight.
P-2	Rolling Hills	10 levels	Set a goal, enter level and weight.
P-3	Hills	10 levels.	Set a goal, enter level and weight.
P-4	Pikes Peak	10 levels.	Set a goal, enter level and weight.
P-5	Hill Interval 1:1	10 levels.	Set a goal, enter level and weight.
P-6	Hill Interval 1:2	10 levels.	Set a goal, enter level and weight.
P-7	Hill Interval 1:3	10 levels.	Set a goal, enter level and weight.
P-8	Cardio	10 levels.	Set a goal, enter level and weight.
P-9	HR Control	N/A	Set a goal, enter weight, age and target heart rate.

See Appendix for program details

#### **Advanced Program Choices:**

Name	Type Data I	Entry Results	
Gerkin Protocol	Walk/run	Age, weight and gender.	VO2 max.
Army PFT	2 mile/3.2 k run	Age, weight, gender and starting speed.	Points.
Air Force PFT	1.5 mile/2.4 k run	Age, weight, gender and starting speed.	Points.
Navy PRT	1.5 mile/2.4 k run under 5000 feet	Age, weight, gender and starting speed.	Points.
Navy PRT	1.5 mile/2.4 k run over 5000 feet	Age, weight, gender and starting speed.	Points.
Marines PRT	3 mile/4.8 k run sea level	Age, weight, gender and starting speed.	Points.
Marines PRT	3 mile/4.8 k run 4500 feet	Age, weight, gender and starting speed.	Points.
One Mile	1 mile/1.6 k walk	Age, weight, gender and starting speed.	VO2 max.
PEB	1.5 mile run	Adjust speed.	Points

PFT means Physical Fitness Test, PRT means Physical Readiness Test and PEB means Physical Efficiency Battery Test.

## **Control During Operation**

Control keys are usable during operation and may be pressed at any time to make adjustments in speed, elevation or data readouts. The **Speed** and **Incline** keys are located near the hand grips, allowing for thumb adjustments without removing your hands from the hand grips.

**Changing Speed** — Press the **Speed** + – keys to change the speed in increments of 0.1 mph or 0.1 kph. Minimum to maximum speed is from 0.5 - 12.4 mph (0.8 - 20.0 kph).

**Changing Incline** — Press the **Incline** ∧ ✓ keys to change the elevation in increments of 1%. Elevation ranges from 0 to 15%. Press multiple times to change incline setting. Elevation is defined as the ratio of rise or fall over run of the treadmill deck.

#### Data Readouts

As you exercise, the treadmill keeps track of the following data:

**BPM (Beats Per Minute)** — Your current heart rate. Heart rate will appear when a signal is introduced. Use the hand grips for Contact Heart rate or wear a Polar<sup>®</sup> compatible heart rate chest strap.

**Calories** — The total accumulated calories burned during your workout. Your weight must be correctly set before beginning your workout for this measurement to be most accurate.

Calories Per Hour — Calculation of present workload's energy exertion in Calories per Hour.

**Distance** — The total accumulated distance, in miles or kilometers, during your workout. Depending on the defaults you've chosen this measurement will show in English or Metric.

**Metabolic Equivalent (METs)** — Relates to the user's energy expenditure. A MET is a basic unit of measurement that is used to compare relative work between individuals and activities. 'One MET' is the amount of oxygen consumed at rest. For example, two METs would be twice that amount. If an individual were working at four METs he/she would be consuming oxygen at a rate equal to four times their resting consumption. METs can be used to compare walking on a grade with running or even to cycling and other activities.

**Pace** — At your current speed, how long it would take to cover a mile (or kilometer), displayed in minutes:seconds.

**Time** — The total time you've been working out or time remaining. Display time as *hours:minutes*.

**Watts** – Present workload energy exertion.

**To review accumulated data after a program:** The display automatically shows the accumulated workout data during the *Workout Review* for the set review time.

## **Displaying Heart Rate**

In order for the Cybex 770T-CT to display your heart rate, hold the hand grips to use Contact Heart rate or wear a Polar<sup>®</sup> compatible heart rate chest strap.

**Contact Heart Rate** — Hold the hand grips on the console handrail until a heart rate is displayed, typically less than thirty seconds. For best results, hold the hand grips lightly and ensure that your hands contact both the front and back sensors of each grip. Hold your hands as steady as possible as movement can cause interference on the contacts.

#### Factors that can interfere with the heart rate signal include:

- excessive movement
- body composition
- hydration
- · too loose grip
- too tight grip
- running
- · excessive dirt, powder or oil
- leaning or resting on grips

Cybex does not recommend continuous holding onto the contact heart rate grips during exercise.

Contaminants, such as hand lotions, oils or body powder, may come off on the contact heart rate grips. These can reduce sensitivity and interfere with the heart rate signal. It is recommended that the user have clean hands when using the contact heart rate.

#### Heart Rate Indicator

**Contact Heart Rate** – Lightly hold hand grips on the handlebar ensuring that hands are clean and contact both the front and back sensors of each grip. A heart rate will display in typically 30 seconds or less.

Factors that interfere with heart rate signal:

- hand lotions
- oils or body powder
- · excessive dirt
- excessive movement
- body composition
- hydration
- too loose grip
- too tight grip
- · resting or leaning on grips

**Wireless Heart Rate** – To use this feature, a Polar® compatible heart rate transmitter belt (not included) must be worn.

Once the actual heart rate is determined, the LED to the right of the Text Area is blinking to the displayed BPM and the Heart LED lights up. The color of the light represents a scale of low to high target heart rate.

•	Blue	0 – 69 BPM
•	Green	70 – 93 BPM
•	Yellow	94 – 119 BPM (Fat Burn Zone)
•	Blood Orange	120 – 169 (Cardio Zone)
•	Magenta	170 and higher

#### **Fan Control**

The fan defaults to the "OFF" setting. The user can change to "LO" or "HI" setting by pressing the appropriate control key.

## Meaning of % Grade

A 1% grade is not the same as a 1 degree incline. The % grade is the relationship of the measurement of rise over the measurement of run (also called slope). For example, a 1 foot (meter) rise in height over a length of 100 feet (meters) is a 1% grade. Expressed as a mathematical formula, the grade is calculated as follows: 1 ft. (m) / 100 ft. (m) = 0.01 = 1%

With respect to treadmills, the percent grade is roughly equal to the increase in height (rise) of the treadmill divided by the length (run) of the treadmill.

The degree of incline can be related to % grade by taking the Arctangent of the grade. For instance, 15% grade is equal to 8.53 Degrees (ArcTan(.15)=8.53°). The opposite is true to determine % Grade from Degree of incline (Tan (8.53°)=.15).

### iPod Functions

**Connecting an iPod** — Connecting an iPod to the 770T-CT allows the unit to control the iPod through the CardioTouch screen and charges the iPod.

- 4. Connect iPod (not supplied) into the 30 pin connector exiting the console.
- 5. Place iPod (not supplied) onto the storage area above the controls located at base of console.

**iPod Playlist** — Select the iPod icon to display the iPod navigation screen.



- If iPod is already playing use the standard iPod controls.
- If iPod is *Dormant* make a selection from the iPod Menu.
- Once a selection is made from the iPod menu, make further selections until the desired media is found.

# **Maintenance**

All preventive maintenance activities must be performed on a regular basis. Performing routine preventive maintenance actions can aid in providing safe, trouble-free operation of all Cybex Strength Systems equipment.

Cybex is not responsible for performing regular inspection and maintenance actions for your machines. Instruct all personnel in equipment inspection and maintenance actions and also in accident reporting/recording. Cybex representatives are available to answer any questions that you may have.

All inspections and repairs must be performed by trained service personnel only. Cybex will void warranty if non-Cybex replacement parts are used.



Use only Cybex replacement parts when servicing. Failure to do so could result in personal injury.

## Warnings

Read all warnings in this chapter and in the Safety Section.

Observe the following warnings and cautions:

- All maintenance activities shall be performed by qualified personnel. Failure to do so could result in serious injury.
- To prevent electrical shock, verify unit is unplugged from the electrical outlet before performing any cleaning or maintenance procedures. A charge can remain after unplugging the power cord.
- · Keep wet items away from inside parts of unit.
- Performance level of equipment can be maintained only if it is examined regularly for damage and wear. Pay special attention to components most susceptible to wear.
- Replace worn or damaged components immediately and/or keep the equipment out of use until repair is completed.

#### Preventive Maintenance Activities

Perform regular preventive maintenance to ensure normal operation of unit. Keep a log of all maintenance actions to assist in staying current with all preventive maintenance activities.

Cybex is not responsible for performing regular inspection and maintenance actions for your unit.

Instruct all personnel in equipment inspection and maintenance actions and also in accident reporting/ recording. Contact Cybex Customer Service at 888-462-9239 or 508-533-4300 for any preventive maintenance or service concerns.

Read and understand warnings listed in this chapter and in the Safety Section. Read and understand all instructions in this section.

During maintenance, disconnect the power cord.

For some maintenance activities it will be necessary to remove and replace the motor cover.

#### **Tool Required**

Phillips screwdriver

## Cleaning Your Treadmill

When cleaning your treadmill spray a mild cleaning agent, such as a water and dishsoap solution, on a clean cloth first and then wipe the treadmill with the damp cloth. Do not spray cleaning solution directly on the treadmill. Direct spraying could cause damage to the electronics and may void the warranty.



WARNING: Serious injury or death can occur. To avoid injury or death the following procedure must be followed. To prevent electrical shock, be sure that power is shut off and the treadmill is unplugged from the electrical outlet before performing any cleaning or maintenance procedures.

After Each Use — Wipe up any liquid spills immediately. After each workout, use a cloth to wipe up any remaining perspiration from the handrails and painted surfaces.

Be careful not to spill or get excessive moisture between the edge of the display panel and the console, as this might create an electrical hazard or cause failure of the electronics.

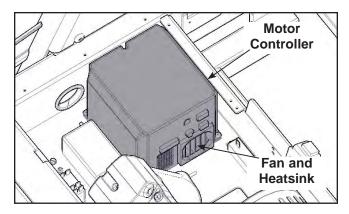
As Needed — Vacuum any dust or dirt that might accumulate under or around the treadmill. Motors are especially susceptible to dust and dirt, and restricted airflow can prevent adequate cooling that could shorten motor life. Cleaning this area should be done as often as indicated in the Service Schedule.



MARNING: Serious injury or death can occur. To avoid injury or death the following procedure must be followed. Keep wet items away from inside parts of the treadmill. Electrical shock could occur even if the treadmill is unplugged. A charge can remain after unplugging the power cord.

To clean the motor components, you must loosen the two Phillips head screws that hold the motor cover in place. Lift the cover straight up; the screws will stay in place. Use a vacuum attachment or hand vacuum to clean the exposed elevation assembly, drive motor, lower electronics and the surrounding areas.

**Fan and Heat Sink** — Vacuum the fan and heat sink area of the motor controller.



Also use a dry cloth for the areas that you can not reach with the vacuum cleaner. If the machine has not been used for some time or is excessively dirty, use a *dry* cloth to wipe all exposed areas.

Carefully raise the rear of the treadmill and roll it back from its present position to vacuum the floor area underneath the unit. When finished, return the treadmill to its normal position.

**Contact Heart Rate Grips** — Contaminants, such as hand lotions, oils or body powder, may come off on the contact heart rate grips. These can reduce sensitivity and interfere with the heart rate signal. It is recommended that the user have clean hands when using the contact heart rate. Clean the grips using a cloth dampened with a cleaning solution containing rubbing alcohol.

**CardioTouch Screen** — While in *Dormant Mode* press the **Cybex** logo icon to access the *Lock and Toolbox* options. Press the **Lock screen for cleaning** icon to lock the screen for 10 seconds. The CardioTouch screen will stay locked for 10 seconds to prevent any key presses from being processed. Clean the CardioTouch screen using a soft cloth dampened with a cleaning solution containing rubbing alcohol.

## Running Belt Maintenance

**Belt and Deck** — Wipe the belt surface and the deck area with a clean dry towel to minimize the effect of friction between the deck and the running belt. This should be done often to prevent premature wear of the deck, running belt, and the drive motor system. See the *Service Schedule* at the end of this chapter.

The running belt may become loose and slip on the drive roller with each foot plant. If it does, follow the *Tension and Center the Belt* procedure below. See the *Service Schedule* in this chapter for a minimum schedule for checking the belt tension.

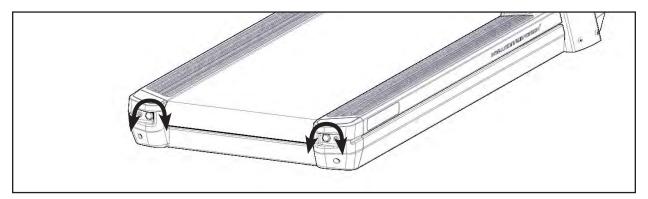
**Tension and Center the Belt** — If the belt is slipping under each step perform this procedure:

#### **Tools Required**

• 3/4" Socket wrench

#### Tension the belt.

**1.** Turn each bolt 1/2 turn clockwise using a 3/4" socket wrench. Be sure to adjust each bolt equally on each side.



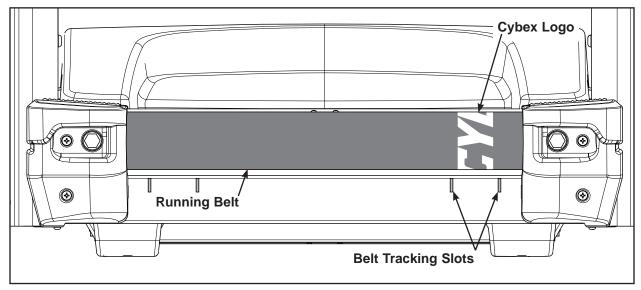
- 2. Press the Quick Start icon.
- 3. Press the **Speed** + to bring the speed up to 3.5-4 mph (5.6-6.4 kph). Allow the treadmill to run for a minute.
- **4.** Observe the belt to be sure it stays centered. If it is not centered follow the *Center the Belt* procedure.
- **5.** Walk on the belt to see if it still slips. If it does restart this procedure at step 1. If you have to do this procedure three times and it still slips call Cybex Customer Service. Follow the next step to be sure the belt is centered.

Be careful not to over tighten the belt. Over tightening the belt can cause the belt to stretch and require replacement.

#### Center the belt.

The lateral position of the running belt is correctly centered when the Cybex logo is centered between the inside edges of the two belt tracking slots. If the Cybex logo is not centered between the belt tracking slots, center the running belt with the following procedure.

**6.** Observe the Cybex logo position relative to the belt tracking slots with the treadmill running at 5 mph (8 kph).



While centering the belt choose one bolt to adjust. Do not adjust both bolts.

- 7. Tighten the rear roller bolt on the side of the treadmill toward which the running belt is moving using a 3/4" socket wrench. For example: If the running belt moves to the right of the belt tracking slots, tighten the bolt on the right side of the frame, tighten about 1/2 of a turn (clockwise) and wait 30 seconds. If the running belt does not move back to the center of the belt tracking slots, make another adjustment to the same bolt. Once the running belt has been adjusted closer to the center of the belt tracking slots, use about 1/4 of a turn until the running belt has been stabilized.
- **8.** Check the belt tension after the running belt has been centered. Make sure the running belt tension is tight enough so that the running belt does not slip or hesitate when stepped on. Walk on the treadmill at 3.5-4 mph (5.6-6.4 kph) and every 4th to 5th step throw your weight into your step to feel if the running belt is slipping. If slipping is felt, confirm it is the running belt slipping and not the drive belt. With the hood cover removed, observe movement at the drive belt and front roller.

If the drive belt is slipping, replace drive belt. Contact Cybex Customer Service.

If the running belt does slip, use a wrench to equally tighten both rear roller adjustment bolts 1/2 of a turn (clockwise). Adjust the running belt until no further slipping is felt.

Checking the Running Belt and Deck Surfaces — The running belt and deck should be checked periodically for any excessive wear. In an effort to make sure that the running belt operates properly, visually inspect the belt often to make sure that there are no tears or fraying in the belt material. The running belt should be replaced every 15,000 miles (24,140 km). The running deck should be flipped every 15,000 miles (24,140 km) and replaced every 30,000 miles (48,280 km). A service prompt will appear at this interval and the parts will need to be replaced.

Inspect the edges of the belt as described below.

#### **Tools Required**

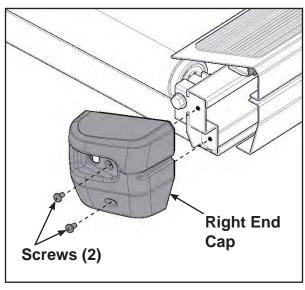
Phillips screwdriver

#### Disconnect the external power source.

- 1. Turn the main power switch under the front end of the unit to the off (O) position.
- **2.** Unplug the treadmill from the power outlet.

#### Check the running belt condition.

1. Remove the two screws securing the right end cap using a Phillips screwdriver.



- **2.** Repeat step 2A for the left end cap.
- 3. Inspect the top surface, seam, and edges of the running belt while you roll it by hand. If the belt has any rips or looks excessively worn the belt needs to be replaced.

If the running belt and deck need replacement refer to a qualified service technician.

**4.** Install the screws securing the end caps removed in steps 2A and 2B using a Phillips screwdriver.

#### Other Preventive Maintenance

Other preventive maintenance activities must be completed by a qualified service technician at the recommended intervals listed in the *Service Schedule* at the end of this chapter. These activities include:

- Flipping or replacing the running deck
- Replacing the running belt

Elevation Motor Lubrication — In time the elevation motor pivot points or tube nut may develop a squeak. Lubricate the upper and lower bolts and the spacers with a small amount of lithium grease. You can buy lithium grease at an auto parts store.

**Static Electricity** — Depending upon where you live, you may experience dry air, causing a common experience of static electricity. This may be especially true in the winter time. You may notice a static build-up just by walking across a carpet and then touching a metal object. The same

can hold true while working out on your treadmill. You may experience a shock due to the buildup of static electricity on your body and the discharge path of the treadmill. If you experience this type of situation, you may want to increase the humidity to a comfortable level through the use of a humidifier.

#### Recommended Service Schedule

All maintenance activities shall be performed by qualified personnel. Failure to do so could result in serious injury.

This is the minimum recommended service.

#### Determine distance.

- 1. While in *Dormant Mode* press the **Cybex** logo icon **Toolbox** and **Lock Screen** options.
- 2. Press the **Access Toolbox** icon to access the *Toolbox* login screen.
- 3. Enter the sequence: To local the sequence To local the sequence
- **4.** Press the **Statistics** icon to access the *Recorded Statistics* screen.
- 5. Locate and tap the icon tor **Treadmill Totals**.
- **6.** Record Distance.
- 7. Press the arrow to return to the Recorded Statistics screen.
- 8. Locate and tap the icon tor Belt or Deck.
- **9.** Record Distance. If replacing the running belt, deck or flipping the deck, tap the Belt or Deck icon as appropriate.
- **10.** Exit Set Up Mode by tapping the **Toolbox** icon **Solution**, then tap the **Home** icon **College**. The screen will refresh.

#### First 500 miles (800 km).

Check running belt tension and tracking.

#### Every 5,000 miles (8,000 km).

- Check running belt tension and tracking.
- Vacuum the fan and heat sink area of the motor controller.
- Move treadmill and vacuum underneath.
- Raise elevation to 15%, carefully roll the treadmill backwards to clean underneath with a dry cloth and vacuum. Return to normal position when done.

## Every 15,000 miles (24,140 km).

- Replace running belt and flip deck.
- Check elevation assembly and replace worn parts.
- Lubricate elevation pivot points.

## Every 30,000 miles (48,280 km).

• Replace running belt and deck.

# **Customer Service**

## **Product Registration**

### To register product do the following:

- 1. Visit www.cybexintl.com.
- 2. Locate Product Registration in the Support section.
- 3. Fill out form completely.
- **4.** Click the Submit button to register product.

## **Contacting Service**

Hours of phone service are Monday through Friday from 8:30 a.m. to 6:00 p.m. Eastern Standard Time.

For Cybex customers living in the USA, contact Cybex Customer Service at 888-462-9239.

For Cybex customers living outside the USA, contact Cybex Customer Service at 508-533-4300 or fax 508-533-5183. email address internationaltechhelp@cybexintl.com

Find information on the web at <a href="www.cybexintl.com">www.cybexintl.com</a> or email at <a href="techhelp@cybexintl.com">techhelp@cybexintl.com</a>.

## **Ordering Parts**

To order parts online go to <a href="www.cybexintl.com">www.cybexintl.com</a>. Select Support > Parts / Ordering. In the left navigation panel, click Parts Diagrams - Current Products. Select from the drop down boxes.

To speak with a customer service representative, call 888-462-9239 (for customers living within the USA) or 508-533-4300 (for customers outside the USA). You may also contact us through email at techhelp@cybexintl.com.

The following information located on the serial number decal will assist our Cybex representatives in serving you.

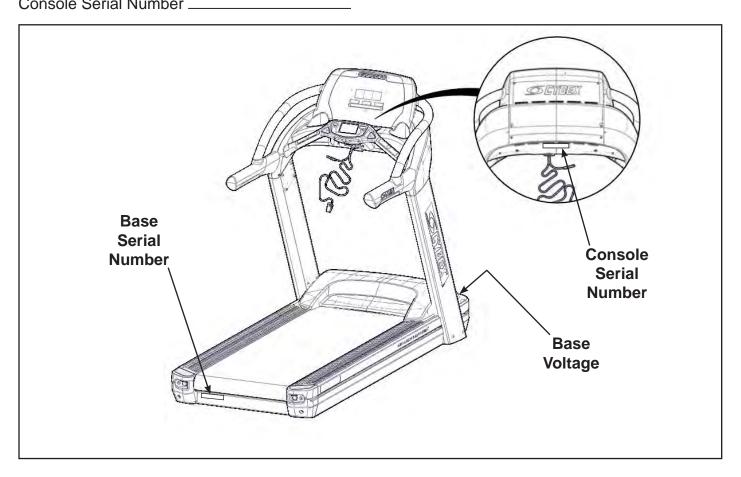
- Unit Serial Number, Product Name and Model Number
- Part Description and Part Number if you have it. All parts can be found on the web at
- www.cybexintl.com
- Shipping Address
- Contact Name
- Include a description of the problem.

In addition to your shipping address and contact name, your account number is helpful but not required. You may also fax orders to 508-533-5183.

## Serial Numbers and Voltage

The base serial number can be found on the rear of your treadmill. The base voltage can be found on the front of your treadmill. The console serial number can be found on the bottom of your console. For your convenience, record your serial numbers and voltage below so that you will have it ready if you call Cybex Customer Service.

Base Serial Number	Base Voltage	
Canada Sarial Number		



### Return Material Authorization (RMA)

The Return Material Authorization (RMA) system is used when returning material for placement, repair or credit. The system assures that returned materials are properly handled and analyzed. Follow the following procedures carefully.

Contact your authorized Cybex dealer on all warranty-related matters. Your local Cybex dealer will request a RMA from Cybex, if applicable. Under no circumstances will defective parts or equipment be accepted by Cybex without proper RMA and an Automated Return Service (ARS) label.

Please contact Cybex Customer Service for the return of any item that is defective.

Provide the technician with a detailed description of the problem you are having or the defect in the item you wish to return. Provide the model and serial number of your Cybex equipment.

At Cybex's discretion, the technician may request that you return the problem part(s) to Cybex for evaluation and repair or replacement. The technician will assign you a RMA number and will send you an ARS label. The ARS label and the RMA numbers must be clearly displayed on the outside of the package that contains the item(s) to be returned. Include the description of the problem, the serial number of the equipment and the name and address of the owner in the package along with the part(s).

Merchandise returned without an RMA number on the outside of the package or shipments sent COD will not be accepted by the Cybex receiving department.

## Damaged Parts

Materials damaged in shipment should not be returned for credit. Shipping damages are the responsibility of the carrier (UPS, Federal Express, trucking companies, etc.)

### **Apparent Damage**

Upon receipt of your shipment, check all items carefully. Any damage seen with a visual check must be noted on the freight bill and signed by the carrier's agent. Failure to do so will result in the carriers refusal to honor your damage claim. The carrier will provide you with the required forms for filing such claims.

## **Concealed Damage**

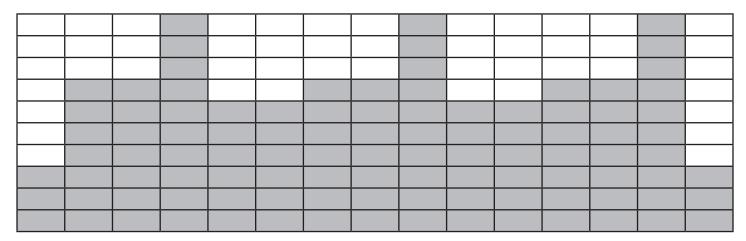
Damage not seen with a visual check upon receipt of a shipment but notices later must be reported to the carrier as soon as possible. Upon discovery of the damage, a written or phone request to the carrier asking them to perform an inspection of the materials must be made within ten days of the delivery date. Keep all shipping containers and packing materials as they will be needed in the inspection process. The carrier will provide you with an inspection report and the necessary forms for filing a concealed damage claim. Concealed damage claim is the carrier's responsibility.

# **Appendix - Program Overviews**

The programs used in the 770T Treadmill with the exception of Heart Rate Control are all incline driven programs where the user has complete control of their speed throughout the entire session. Individuals can tailor the use of program level and speed selection to meet their own needs. For instance, an individual who cannot or chooses not to run can use a speed that they are comfortable with in conjunction with a high program level for increased demand. Likewise, a runner may pick a pace they are comfortable with in conjunction with a lower program level to mimic real world elevation changes.

## P-1 Weight Loss

The Weight Loss program uses a series of relatively minor changes in its five-minute core to add an incremental demand. The five-minute core utilizes a baseline incline for two minutes and then increases the incline for added demand and then provides a slightly lower Incline for two-minutes for recovery.



Time	:30	:30	:30	:30	1:00	1:00	1:00	1:00	1:00	:30	:30	:30	:30
		Warr	n Up			Progra	m Seg	ments	Cool Down				
Incline	1	2	3	4	1	2	3	4	5	1	2	3	4
10	2	3	3	5	10	10	14	9	9	1	2	3	4
9	2	3	3	5	9	9	12	8	8	0	0	0	0
8	2	2	3	4	8	8	10	7	7	0	0	0	0
7	2	2	3	4	7	7	9	6	6	0	0	0	0
6	1	2	2	3	6	6	7	5	5	0	0	0	0
5	1	2	2	3	5	5	6	4	4	0	0	0	0
4	1	1	2	2	4	4	5	3	3	0	0	0	0
3	1	1	2	2	3	3	4	2	2	0	0	0	0
2	1	1	1	2	2	2	3	1	1	0	0	0	0
1	1	1	1	2	1	1	2	0	0	0	0	0	0

# **P-2 Rolling Hills**

The Rolling Hills program uses an eight-minute core intended to mimic variety in terrain that might be found on a hilly outdoor run. The eight-minute core is composed of four segments. The baseline segment is two –minutes in length and is followed by two two-minute segments of increase Incline before returning to the intermediate incline for two-minutes.

Time	:30	:30	:30	:30	2:00	2:00	2:00	2:00	:30	:30	:30	:30	
		Warr	n Up		Pr	ogram	Segmer	nts	Cool Down				
Incline	1	2	3	4	1	2	3	4	1	2	3	4	
10	1	2	2	3	4	6	8	6	0	0	0	0	
9	1	1	2	2	3	6	8	5	0	0	0	0	
8	1	1	2	2	3	5	8	5	0	0	0	0	
7	1	1	1	2	2	5	7	4	0	0	0	0	
6	1	1	1	2	2	4	7	4	0	0	0	0	
5	0	0	1	1	1	4	7	3	0	0	0	0	
4	0	0	1	1	1	3	6	3	0	0	0	0	
3	0	0	0	0	0	3	6	3	0	0	0	0	
2	0	0	0	0	0	2	6	2	0	0	0	0	
1	0	0	0	0	0	2	5	2	0	0	0	0	

## P-3 Hills

The Hills program uses a six-minute core utilizing one minute segments with mild Incline changes and two relative peak segments followed by relative rest segments.

Time	:30	:30	:30	:30	1:00	1:00	1:00	1:00	1:00	1:00	:30	:30	:30	:30
		Warr	n Up		Program Segments						Cool Down			
Incline	1	2	3	4	1	2	3	4	5	6	1	2	3	4
10	3	3	5	6	8	10	12	10	15	10	0	0	0	0
9	2	3	4	5	7	9	12	9	14	9	0	0	0	0
8	2	3	3	5	6	8	11	8	13	8	0	0	0	0
7	2	2	3	4	5	7	10	7	12	7	0	0	0	0
6	1	2	2	3	4	6	9	6	11	6	0	0	0	0
5	1	1	2	2	3	5	8	5	10	5	0	0	0	0
4	1	1	1	2	2	4	7	4	9	4	0	0	0	0
3	0	0	1	1	1	3	6	3	8	3	0	0	0	0
2	0	0	0	0	0	2	5	3	7	3	0	0	0	0
1	0	0	0	0	0	2	4	2	6	2	0	0	0	0

## P-4 Pikes Peak

Pikes Peak uses a nine-minute core where the incline increases every minute for the first five minutes. After the fifth minute of the core program, the incline is reduced each minute. This program uses continuous and gradual changes to give the user time to acclimate to demand and recover without large perceived changes in the effort required.

Time	:30	:30	:30	:30	1:00	1:00	1:00	1:00	1:00	1:00	1:00	1:00	1:00	:30	:30	:30	:30	
		Warn	n Up			•	Р	rogra	m Seç	gment	S			Cool Down				
Incline	ncline 1 2 3 4				1	2	3	4	5	6	7	8	9	1	2	3	4	
10	2	2	3	4	5	8	11	13	15	13	11	8	5	0	0	0	0	
9	1	2	2	3	4	7	10	12	14	12	10	7	4	0	0	0	0	
8	1	2	2	3	4	6	9	11	13	11	9	6	4	0	0	0	0	
7	1	1	2	2	3	5	8	10	12	10	8	5	3	0	0	0	0	
6	1	1	2	2	3	5	7	9	11	9	7	5	3	0	0	0	0	
5	1	1	1	2	2	4	6	8	10	8	6	4	2	0	0	0	0	
4	1	1	1	2	2	3	5	7	9	7	5	3	2	0	0	0	0	
3	1	1	1	2	2	3	4	6	8	6	4	3	2	0	0	0	0	
2	0	0	1	1	1	2	3	5	7	5	3	2	1	0	0	0	0	
1	0	0	0	0	0	1	2	4	6	4	2	1	0	0	0	0	0	

## P-5 Hill Interval 1:1

This program is designed for to increase capability by alternating two minute work segments with two minutes of relative rest. The intensity of rest periods is greater here than in Hill Interval 1:2 as is the duration of the work interval making this program more demanding than Hill Interval 1:2.

Time	:30	:30	:30	:30	1:00	1:00	1:00	1:00	:30	:30	:30	:30		
		Warr	n Up		Pr	ogram	Segmer	nts	Cool Down					
Incline	1	2	3	4	1	2	3	4	1	2	3	4		
10	3	5	6	8	11	11	6	6	0	0	0	0		
9	3	4	6	8	10	10	5	5	0	0	0	0		
8	3	4	5	7	9	9	5	5	0	0	0	0		
7	3	3	5	6	8	8	4	4	0	0	0	0		
6	2	3	4	5	7	7	4	4	0	0	0	0		
5	2	3	3	5	6	6	3	3	0	0	0	0		
4	2	2	3	4	5	5	3	3	0	0	0	0		
3	1	2	2	3	4	4	2	2	0	0	0	0		
2	1	1	2	2	3	3	2	2	0	0	0	0		
1	1	1	1	2	2	2	1	1	0	0	0	0		

## P-6 Hill Interval 1:2

This program is designed for to through a one-minute work interval at a high incline followed by a two minute rest interval at a substantially lower incline. Given the lower incline and longer rest intervals this program is less intense than Hill Interval 1:1.

Time	:30	:30	:30	:30	1:00	1:00	1:00	:30	:30	:30	:30		
		Warr	n Up		Progr	am Segi	ments	Cool Down					
Incline	1	2	3	4	1	2	3	1	2	3	4		
10	3	5	6	8	11	4	4	0	0	0	0		
9	3	4	6	8	10	3	3	0	0	0	0		
8	3	4	5	7	9	3	3	0	0	0	0		
7	3	3	5	6	8	3	3	0	0	0	0		
6	2	3	4	5	7	2	2	0	0	0	0		
5	2	3	3	5	6	2	2	0	0	0	0		
4	2	2	3	4	5	2	2	0	0	0	0		
3	1	2	2	3	4	1	1	0	0	0	0		
2	1	1	2	2	3	1	1	0	0	0	0		
1	1	1	1	2	2	1	1	0	0	0	0		

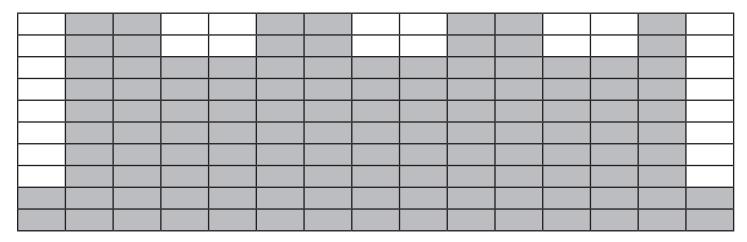
## P-7 Hill Interval 1:3

Hill Interval 1:3 utilizes a one-minute work interval followed by a three-minute rest interval. The rest intervals are of a higher incline that those found in the other Hill Interval programs, and therefore require a longer recovery period.

Time	:30	:30	:30	:30	1:00	1:00	1:00	1:00	:30	:30	:30	:30	
		Warr	n Up		Pr	ogram	Segme	nts	Cool Down				
Incline	1	2	3	4	1	2	3	4	1	2	3	4	
10	3	5	6	8	11	7	7	7	0	0	0	0	
9	3	4	6	8	10	7	7	7	0	0	0	0	
8	3	4	5	7	9	6	6	6	0	0	0	0	
7	3	3	5	6	8	5	5	5	0	0	0	0	
6	2	3	4	5	7	5	5	5	0	0	0	0	
5	2	3	3	5	6	4	4	4	0	0	0	0	
4	2	2	3	4	5	3	3	3	0	0	0	0	
3	1	2	2	3	4	3	3	3	0	0	0	0	
2	1	1	2	2	3	2	2	2	0	0	0	0	
1	1	1	1	2	2	1	1	1	0	0	0	0	

## P-8 Cardio

The Cardio program is designed to maintain a high total demand using two four-minute segments of alternating incline. This allows prolonged intervals that take advantage of long-term energy systems and total aerobic capability when associated with speeds that require a high sustained cardiovascular demand.



Time	:30	:30	:30	:30	4:00	4:00	:30	:30	:30	:30			
		Warr	n Up			gram nents	Cool Down						
Incline	1	2	3	4	1	2	1	2	3	4			
10	2	3	3	5	11	9	0	0	0	0			
9	2	3	3	5	10	8	0	0	0	0			
8	2	3	3	5	9	7	0	0	0	0			
7	2	2	3	4	8	6	0	0	0	0			
6	2	2	3	4	7	5	0	0	0	0			
5	2	2	3	4	6	4	0	0	0	0			
4	2	2	3	4	5	3	0	0	0	0			
3	1	2	2	3	4	2	0	0	0	0			
2	0	0	1	2	3	1	0	0	0	0			
1	0	0	0	0	2	0	0	0	0	0			

## P-9 Heart Rate Control Program

Note: This program requires the user to wear a Polar or compatible Heart Rate transmitter belt. The Heart Rate Control Program (HRCP) cannot be selected on the control console unless the treadmill detects a Heart Rate signal. The HRCP will not work with the cardio touch contact Heart Rate system.

After selecting the HRCP, the treadmill will prompt you for workout time, weight, age, and target Heart Rate. Your age is required to estimate the proper range of Heart Rates. The target Heart Rate is calculated by the formula 220 minus your age times 75%. You will then have the option of adjusting the suggested target Heart Rate selected either up or down. Select a target Heart Rate which will allow you to exercise comfortably and safely while at the same time allowing you to reach your training goals. If you are unsure of what to select as your target, consult your physician or a physical training professional, After starting the HRCP, the treadmill will attempt raise your Heart Rate to your target within 3 to 5 minutes. The treadmill will emphasize using elevation of the treadmill deck first to achieve higher workloads and thus higher Heart Rates; this is done to maximize the use of a walking gait, which is safer and more comfortable for many users. As a result, many users will spend nearly the entire program at elevation up to 12% grade. After reaching your target, the treadmill will attempt to keep you there within 5 beats per min. As you tire, the treadmill will compensate by reducing elevation, speed or both. A two-minute cool-down is built in at the end of the program.

#### Method of HRCP:

User selects Heart Rate target in the initial start of program or accepts the suggested target of 75% of 220 minus age. This target Heart Rate is extremely important for more reasons than just the establishment of the target itself. It also makes an assumption of the general fitness level and controls several aspects of how quickly the elevation and speed will be adjusted. As an example, the starting speed for a selected target of 120 bpm (beats per minute) will be 2 mph. The starting speed for a selected target of 140 bpm will be 3.5 mph. In between those selected targets the starting speed will be proportional to the difference between 2 to 3.5. The integral gain constants will also be modified depending on what the selected target is at the start of the program. This means someone with a higher selected target will get faster changes in speed and grade than someone with a lower target. This has the effect of getting the more fit user to their selected target faster without overshooting the target for someone with a lower fitness level. After the starting speed is attained by the treadmill, it will then increase the elevation every 15 seconds up to 12% grade or until the computer senses that the user is getting close to approaching their target Heart Rate. Since the control is somewhat predictive in nature, it will leave ample room for the user's Heart Rate to catch up to the increasing load. If the target Heart Rate is not attained at the load level of the start speed at 12% grade, then the treadmill will start increasing speed every 15 seconds up to 4 mph or until the computer senses that the user is getting close to approaching their target Heart Rate. If the user is still not at the target, the treadmill will increase speed to 5 mph and drop the elevation down to 8% grade. This is done because the speeds between 4 and 5 are difficult for the user because it is too slow to jog and too fast for many to walk. The drop in elevation compensates somewhat for the larger increase in speed. The system will then increase the speed of the belt every 15 seconds up to the maximum speed of the treadmill or until the computer senses that the user is getting close to approaching their target Heart Rate. At any time if the users Heart Rate exceeds the target, the load will be decreased in the same order it was increased to ensure that the rate is stabilized at or below the target. When the time period is reached that is two minutes before the selected total time of the workout, the system will go into the cool down mode. This cool down will be similar to the cool down protocols in all the other programs on the treadmill.

During the control period, the user has limited control over speed and elevation. Within the initial elevation climb segment up to 12 % grade, the users may vary elevation but not speed. Within the other segments the user can vary speed but not elevation. The user's selections are not persistent, however. At the next 15-second mark, the controller as described above will generally choose a new speed or elevation. The user is in fact advancing or retarding the action of the servo.

If at any time the Heart Rate signal is lost, the system will make no changes in load until such time as the HR signal is regained. If the Heart Rate signal continues to be lost (no stable HR) for a time period exceeding one minute, then start the cool down profile regardless of what the time period is.