



Cybex Arc Trainer 600A
Owner's & Service Manual
Cardiovascular Systems
Part Number LT-17070-4

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10 Trotter Drive Medway, MA 02053 • 800-766-3211 • 508-533-4300 • FAX 508-533-5183
www.cybexinternational.com • techhelp@cybexintl.com • techpubs@cybexintl.com • LT-17070-4 • June 2004

About This Manual

An Owner's & Service Manual is shipped with each Cybex Arc Trainer. To purchase additional copies of this manual or any other Cybex manual, please do one of the following:

- order online at www.cybexinternational.com
- fax your order to 508-533-5183
- contact Cybex Customer Service at 800-766-3211
- or contact Cybex Customer Service at 508-533-4300

To contact Cybex with comments about this manual you may send email to techpubs@cybexintl.com.

FCC Compliance Information

! WARNING: 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 B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment off and on) the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

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1- Safety

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IMPORTANT: Read all instructions and warnings before using the unit.

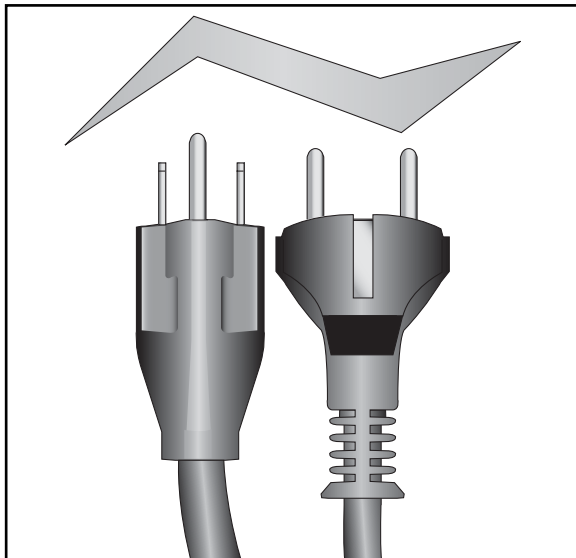
Important Voltage Information

Before plugging the power cord into an electrical outlet, verify that the voltage requirements for your area match the voltage of the unit that you have received. The power requirements for the unit include a grounded circuit, rated for one of the following: 115 VAC $\pm 5\%$, 50/60 Hz and 15 amps; or 230 VAC $\pm 10\%$, 50/60 Hz and 10 amps. See the voltage requirement decal for the exact voltage requirements of your unit.

! WARNING: Do not attempt to use this unit with a voltage adapter.
Do not attempt to use this unit with an extension cord.

Grounding Instructions

This unit 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.



115V NEMA 5-15 Euro Plug CEE 7/7

! DANGER: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service provider if you are in doubt as to whether the unit is properly grounded. Seek a qualified electrician to perform any modifications to the cord or plug. Cybox is not responsible for injuries or damages as a result of cord or plug modification.

This unit is for use on a nominal 115 VAC $\pm 5\%$, 50/60 Hz and 15 amps; or 230 VAC $\pm 10\%$, 50/60 Hz and 10 amps and a grounded

circuit. Make sure that the unit 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: *To reduce the risk of electric shock, always unplug this unit from the electrical outlet immediately after using it and before cleaning it.*

! WARNING: *Serious injury could occur if these precautions are not observed. To reduce the risk of burns, fires, electric shock, or injury:*

- Obtain a medical exam before beginning any exercise program.
- Keep children away from the unit. Teenagers and disabled persons must be supervised while using.
- Stop exercising if you feel faint, dizzy, or experience pain at any time while exercising and consult your physician.
- Use the unit handrails for support and to maintain balance.
- Use caution when mounting and dismounting the unit.
- Disconnect all power before servicing the unit.
- Connect the unit to a properly grounded outlet only.
- Do not operate electrically powered units in damp or wet locations.
- Stop and place the unit at its starting incline level after each use.
- Use this unit for commercial use only.
- Do not leave this unit unattended when plugged in and running. ***NOTE:*** *Before leaving the unit unattended, always wait until the unit 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. Place the power cord in a secure place to prevent unauthorized use.*
- Inspect the unit for worn or loose components before each use. Do not use until worn or damaged parts are replaced.
- Maintain and replace worn parts regularly. Refer to the "Preventive Maintenance" section of the Owner's Manual.
- Do not operate the unit if: (1) the cord is damaged; (2) the unit is not working properly or (3) if the unit has been dropped or damaged. Seek service from a qualified technician.

Cybox Arc Trainer Owner's & Service Manual

- Do not place the cord near heated surfaces or sharp edges.
- Do not use the unit outdoors.
- Do not operate the unit around or where aerosol (spray) or where oxygen products are being used.
- Read and understand the Owner's Manual completely before using the unit.
- Read and understand all warnings posted on the unit and in the Owner's Manual before using the unit.
- Replace any warning label if damaged, worn or illegible.
- Do not wear loose or dangling clothing while using the unit.
- Always wear proper footwear on or around exercise equipment.
- Keep all body parts, hair, towels, water bottles, and the like free and clear of moving parts.
- Set up and operate the unit on a solid, level surface. Do not operate in recessed areas or on plush carpet.
- Make sure there is enough room for safe access and operation of this unit.
- Do not attempt repairs, electrical or mechanical. Seek qualified repair personnel when servicing. If you live in the USA, contact Cybex Customer Service at 800-766-3211 (then press 64). If you live outside the USA, contact Cybex Customer Service at 508-533-4300.
- Use Cybex factory parts when replacing parts on the unit.
- Do not modify the unit in any way.
- Do not use attachments unless recommended for the unit by Cybex.
- Report any malfunctions, damage or repairs to the facility.
- Do not use the unit if you exceed 400 lbs. (181 kg). **NOTE:** *The rated maximum user weight is 400 lbs. (181 kg).*

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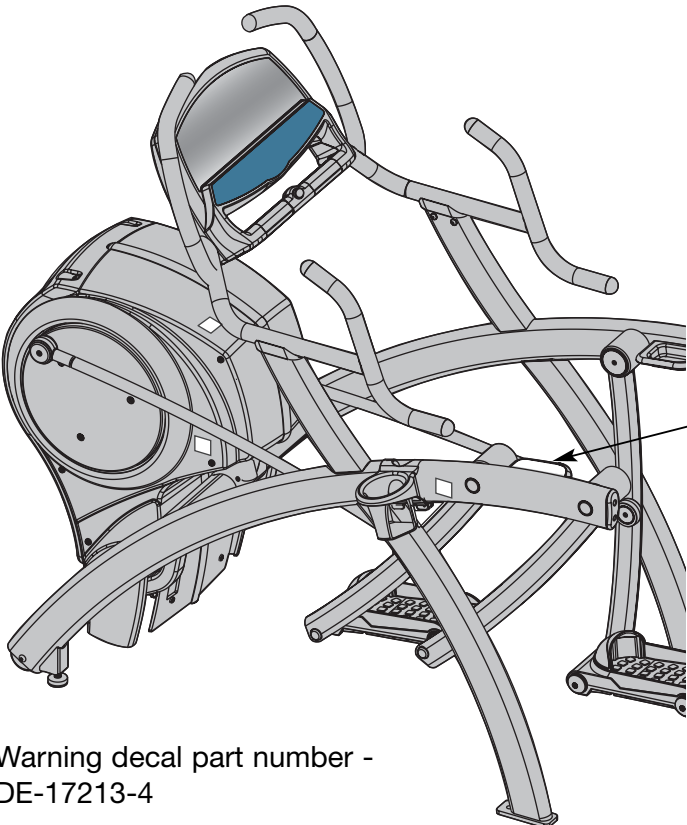
Warning Decals

Carefully read and understand the following before using the unit:

- Warning Decals
- Caution Decals

To replace any worn or damaged decals do one of the following: Visit eCybex.com to shop for parts online, fax your order to 508-533-5183 or contact Cybex Customer Service at 800-766-3211. If you live outside of the USA, call 508-533-4300. For location or part number of decals, see the parts list and exploded-view diagram. This information can be found in the *Service* chapter in this manual or on Cybex web site at ecybex.com.

Warning decals indicate a potentially hazardous situation, which, if not avoided, could result in death or serious injury. The warning decals used on the Cybex Arc Trainer are shown below.



WARNING

SERIOUS INJURY COULD OCCUR IF THESE PRECAUTIONS ARE NOT OBSERVED

Keep children away. Teenagers and disabled must be supervised. *Tenez les enfants éloignés. Les adolescents et les handicapés doivent être surveillés.*

Obtain instruction before using. *Lisez les instructions avant l'utilisation.*

Wait until foot plates come to a complete stop before dismounting. *Attendre l'arrêt complet des repose pieds avant de descendre.*

Obtain a medical exam before beginning any exercise program.

Stop exercising if you feel faint, dizzy, or experience pain.

Read and understand the Owner's Manual and all warnings posted on the unit before using.

DO NOT wear loose or dangling clothing while using.

Keep all body parts, towels, and the like free and clear of moving parts.

Use the handrails for support and to maintain balance.

DO NOT use the unit if you exceed 400 lbs. (180 kg). This is the rated maximum user weight.

Replace any warning labels if damaged, worn or illegible.

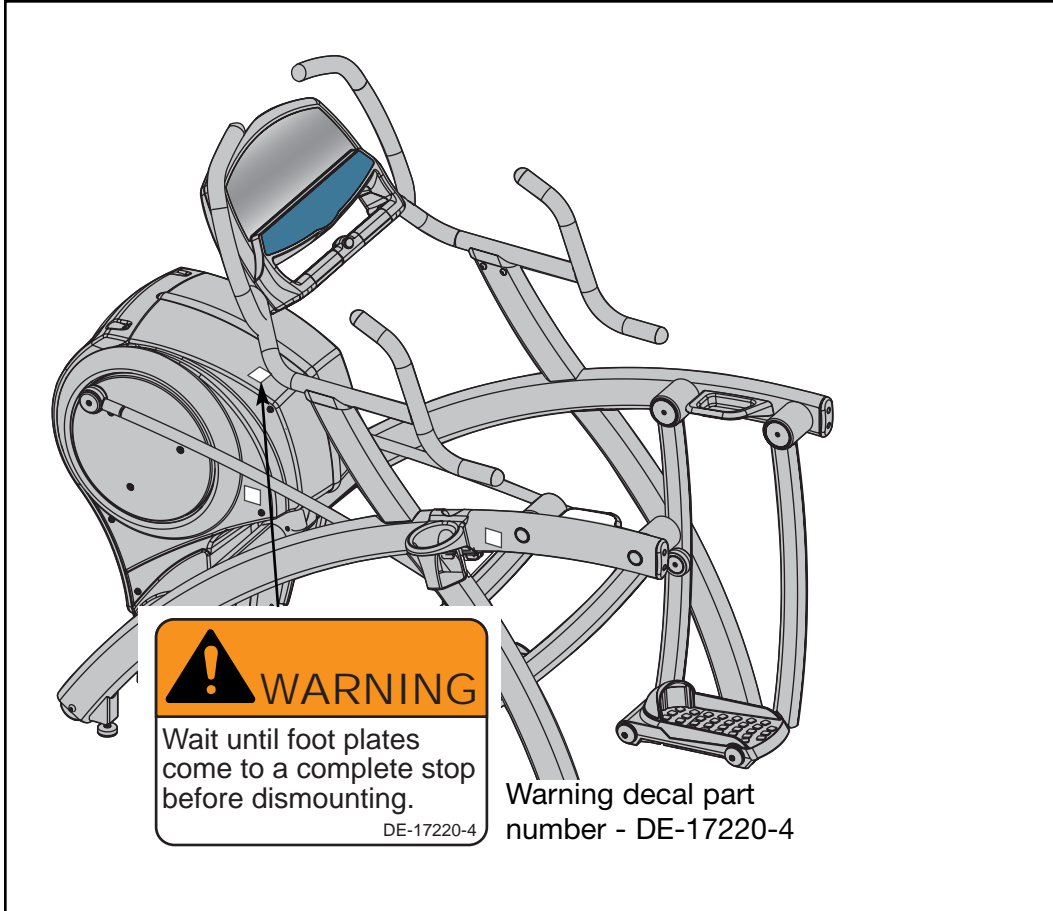
Report any malfunctions, damage or repairs to the facility.

DE-17213-4

Warning decal part number -
DE-17213-4

1 Safety

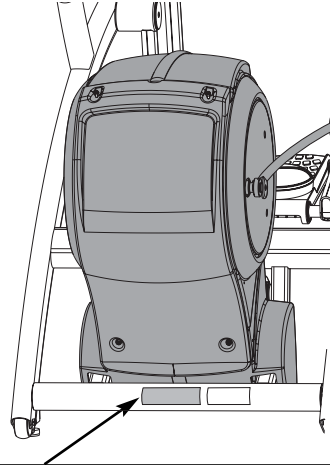
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Underneath
Access Cover




Warning decal part number - DE-17322-4



Warning decal part number - DE-16928

 WARNING	AVERTISSEMENT	WARNUNG	ADVERTENCIA	警告	VARNING
DISCONNECT POWER BEFORE SERVICING.	DÉBRANCHEZ L'ALIMENTATION AVANT DE FAIRE L'ENTRETIEN	VOR SERVICEAR- BEITEN NETZSTECKER ZIEHEN.	CORTE LA ENERGIA ELECTRICA ANTES DE REPARAR.	修理点検の前に 電源を 切ってください。	KOPPLA IFRÅN STRÖMMEN INNAN SERVICE UTFÖRS.

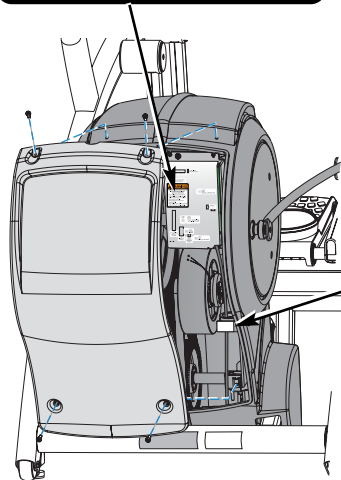
DE-16928

 **WARNING**

**SERIOUS INJURY COULD OCCUR
IF THESE PRECAUTIONS
ARE NOT OBSERVED**

High voltage is present under this shield. This shield should only be removed by a qualified service technician.
Keep wet items away from inside parts.
High voltage may still be present even if the unit is unplugged.

Shield part number - PL-17237-4



Warning decal part number - DE-17155-4

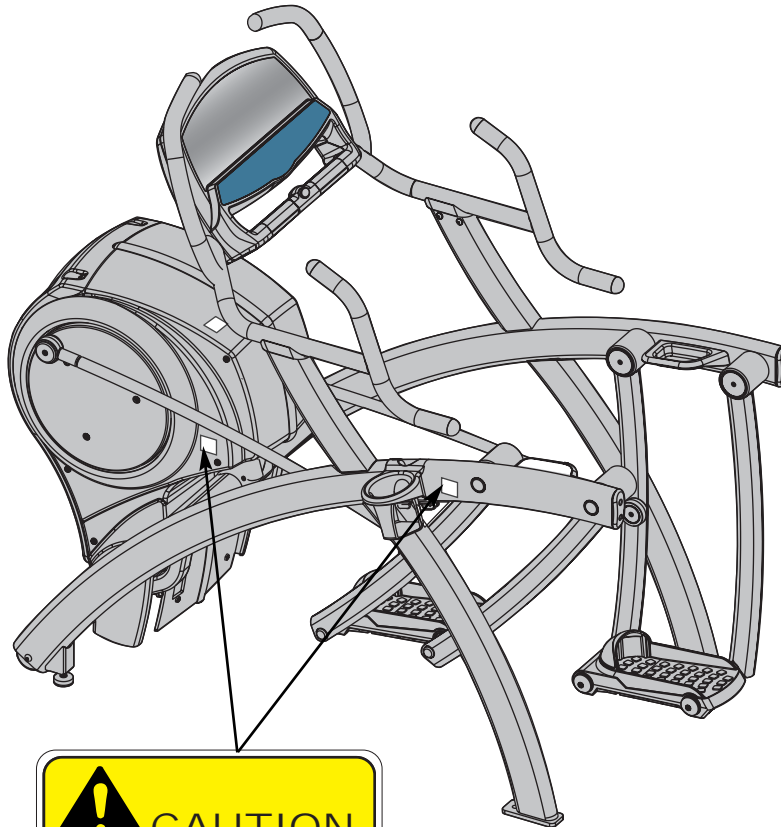
 **WARNING**

Hot flywheel! Wait until it cools before servicing.

DE-17155-4

Caution Decals

Caution decals indicate a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. The caution decals used on the Cybox Arc Trainer are shown below.



Caution decal part number - DE-17219-4

NOTE: This decal is located on both sides of the unit in a total of 4 locations.

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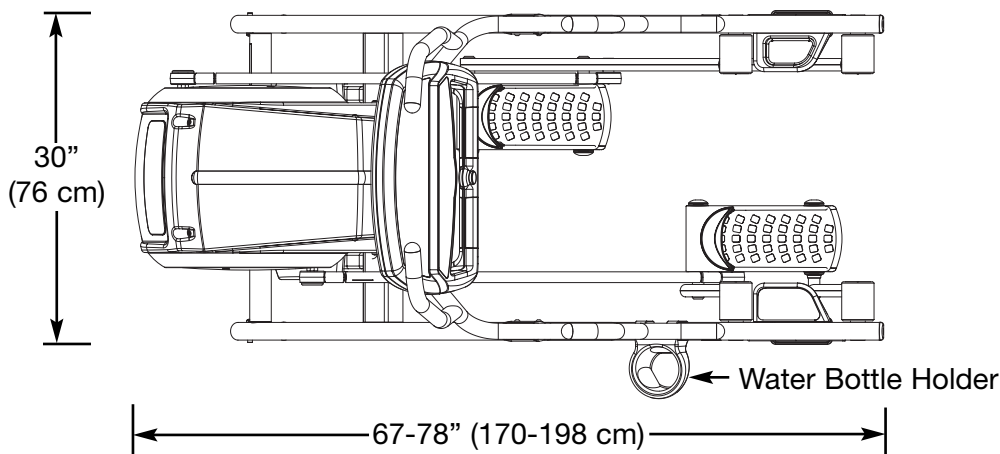
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2 - Technical Specifications

Specifications

- Length: 67" (170 cm) **NOTE:** When highest incline is in use the length increases to 78" (198 cm).
- Width: 30" (76 cm) **NOTE:** Measurement is without the water bottle holder.
- Weight of Product: 325 lbs. (146 kg)
- Shipping Weight: 400 lbs. (181 kg)
- Incline Levels: 11 (Represented by 0-10% in increments of 1)
- Resistance Levels: 101 (Represented by 0-100% in increments of 1)
- Stride Length: 24" (61 cm) fixed length
- Programs: Quick Start plus Manual, Weight Loss, Cardio, Interval, Hill and Strength
- Console Features: Upper Console: Dot Matrix of program, large 1" LED display of distance, calories, METS, strides per minute and heart rate.
Lower Console: LED display of resistance and dual function display of time and incline
- Heart Rate Features: Built-in wireless heart rate receiver (transmitter not included) and contact heart rate monitoring
- Frame Colors: Standard: White texture, black texture, silver vein, black chrome, platinum sparkle,
Custom: Unlimited colors available.
- Resistance Range: 0-900 watt
- Maximum User Weight: 400 lbs. (181 kg)
- Power Rating: 115v 50/60 Hz 2A (230v 50/60 Hz 1 amp)
- Outlet Rating: 4 amps (or 5 amps outside of the United States)
- Power Requirement: A grounded circuit and one of the following:
 - 115 VAC ±5%, 50/60 Hz and 15 amps,
 - 230 VAC ±10%, 50/60 Hz and 10 amps



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3 - Operation

Read and understand all instructions and warnings prior to using the unit. See all of the safety related information located in chapter 1.

Terms & Symbols 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.

Dormant Mode — This occurs when the unit is plugged in, turned to the on (I) position and not in use. The control panel will display a beating heart when the unit is in *Dormant Mode*.

Program Setup Mode — This begins after pressing any program key. Upon entering a program the LEDs flash, prompting the user to adjust the appropriate settings.

Active Mode — This begins immediately after pressing the **Quick Start** key (*Manual Mode*), or after the *Program Setup Mode*. The beginning of *Active Mode* is marked by the 3 second countdown. *Active Mode* continues until you reach the end of a program or press the **Stop** key.

Quick Start — This begins by pressing the **Quick Start** key. **Quick Start** skips the *Program Setup Mode* and begins immediately in *Manual Mode*.

Manual Mode — This begins immediately after pressing the **Quick Start** key or after pressing the **Manual** program key. In *Manual Mode* you can customize your workout **Resistance** and **Time** and enter your **Weight** by pressing those keys. **NOTE:** *Manual Mode features differ from the Manual Program. See the Manual section in this chapter.*

Workout Review — This begins after pressing the **Stop** key once, at the end of a program or when you stop striding for 25 seconds. The workout statistics accumulated during the previous workout session will display for 20 seconds (default setting) or until **Stop** is pressed again. **NOTE:** *You can change the 20 second default. See Setting Operation Options in chapter 5.*

Pause Mode — This begins when the you stop striding for 25 seconds or when you press **Stop** once. While in *Workout Review* you can press the **Quick Start** key to resume your workout in *Manual Mode*. The time, calories burned and other accumulated data is remembered and added to.

▲▼ — These keys adjust **Time**, **Level** or **Weight** up or down.

↑↓ — These keys adjust **Incline** higher or lower.

+ - — These keys adjust **Resistance** up (+) or down (-).

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Quick Operation Guide

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

The following is a quick overview of the operation of the unit. For more information read *Detailed Operation Guide* in this chapter. **NOTE:** Times specified in this chapter reflect the unit's defaults. To change the defaults see *Setting Operation Options* in chapter 5.

1. Hold the handrails to steady yourself while you step into the foot plates.
2. Press any program key or press **Quick Start** to skip the settings and begin *Manual Mode* immediately.
3. If you pressed a program key to select a program, you will now be prompted for workout **Time, Weight, and Level** as appropriate. Adjust these settings with the ▲▼ arrows and press **Enter** to proceed. **IMPORTANT: Enter your actual weight.** The **Resistance + –** keys calculate the proper resistance for your weight. Your workout may feel too easy or too difficult if you do not enter your actual weight.
4. The unit begins a countdown, "3...2...1" then the resistance increases to correspond to the program that you selected.
5. Begin striding.
6. Press the **Resistance + –** keys to change the load at any time. The right display will show the current resistance setting.
7. Press the **Incline ↑↓** keys to change the incline at any time. The left display will show the current incline setting.
8. Press the **Stop** key at any time.

! WARNING: Wait until all moving parts come to a complete stop before dismounting.

9. Wait until foot plates come to a complete stop before dismounting the unit. Hold the handrails to steady yourself while you step off the unit.

Detailed Operation Guide

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

1. Plug the power cord into a power outlet on a grounded circuit, rated for one of the following: 115 VAC ±5%, 50/60 Hz and 15 amps; or 230 VAC ±10%, 50/60 Hz and 10 amps.
2. Locate the on/off (I/O) power switch (near the power cord inlet). Toggle it to the on (I) position to supply power to the internal components and illuminate the control panel.
3. Hold the handrails to steady yourself while you step into the foot plates.

4. You now have the option to select a program or to select **Quick Start**, skip *Program Setup Mode*, and enter *Manual Mode*.

To select a program, press a program key and follow the prompts. Upon entering a program the LEDs flash, prompting you to adjust the appropriate settings. This is referred to as *Program Setup Mode*. If the **Quick 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 **Enter** or **Quick Start** key. If no key has been pressed for 20 seconds after displaying the last default, then the unit will return to the *Dormant Mode*.

If you press the **Quick Start** key instead of choosing a program, you will enter *Manual Mode*. **NOTE:** *No prompts will occur in Manual Mode.* While in *Manual Mode*, customize your workout **Resistance** and **Incline** and enter your **Weight** by pressing those keys.

IMPORTANT: *Enter your actual weight. The **Resistance + –** keys calculate the proper resistance for your weight. Your workout may feel too easy or too difficult if you do not enter your actual weight. For the most accurate calorie count, you must set your correct weight before beginning your workout (including clothing).*

NOTE: *Press **Enter** after each adjustment.*

When you enter *Program Setup Mode* or *Manual Mode* the unit will rock slightly. This ensures free movement of the Arc Trainer.

5. The unit begins a countdown, “3...2...1” and sounds a tone for each count. When it reaches one (1) it gives a longer tone. Depending on which program and level you selected, the resistance may begin to increase and the incline may rise or fall.
6. Observe the four displays:
 - The lower left display flashes the actual incline until the desired incline is reached and then reverts to time. During your workout the time will show in the format of minutes:seconds. If your workout exceeds sixty minutes the time format will change to minutes only.
 - The lower right display shows the user’s current resistance.
 - The top center display begins showing your program profile at the left side.
 - The center display shows statistics or adjustable settings. This scans (every three seconds) through **Distance**, **Calories**, **Mets** and **Strides Per Minute**. Press the **Scan** key to toggle this feature on or off.

NOTE: *Heart Rate is scanned only when you are holding the contact heart rate grips or using Polar compatible heart rate transmitter. See Figure 1.*

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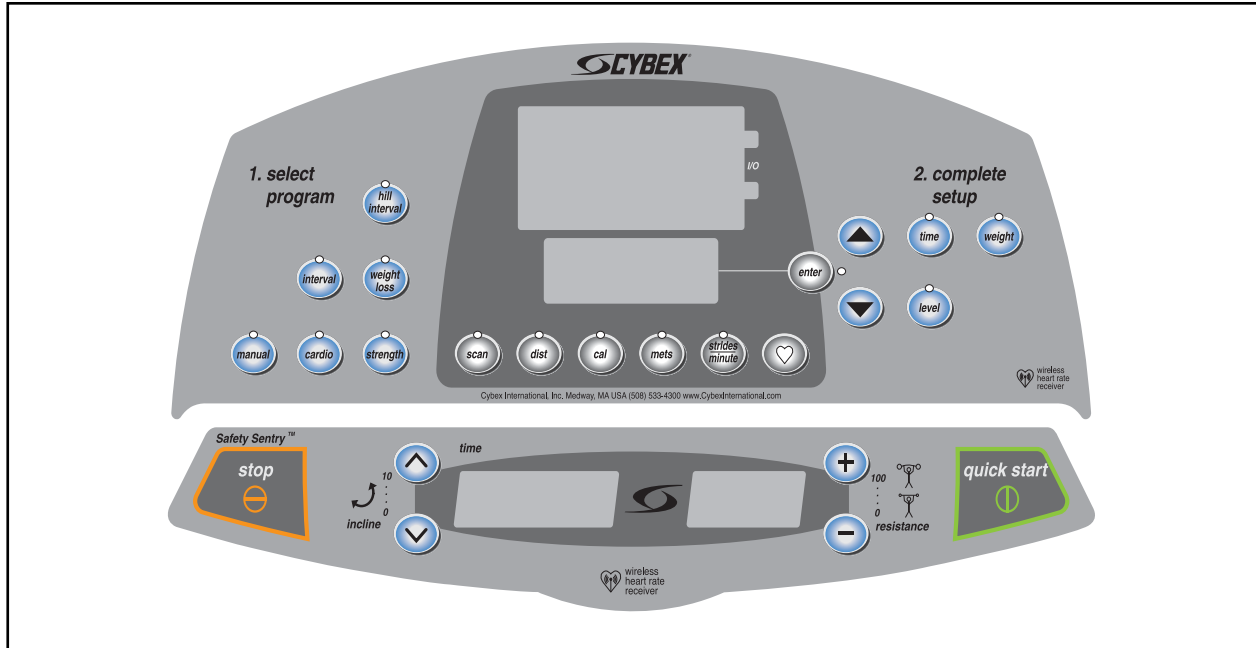


Figure 1

7. Press the **Resistance + —** keys to change the load at any time. Pressing the **+** key will make your workout harder. Pressing the **—** key will make your workout easier. The right display will show the current resistance in increments of 1 from 0 to 100.
8. Press the **Incline ↑ ↓** keys to change the incline at any time. The left display will show the current incline (only while it is adjusting), in increments of 1 from 0 to 10.
9. Press the **Stop** key at any time to stop your workout. Press **Stop** once to end your workout and begin your *Workout Review*. As you press **Stop** once, the unit will return to level 3 incline (starting position). Press **Stop** twice to clear the *Workout Review* and return to *Dormant Mode*.
10. When you complete a program the unit begins a countdown, “3...2...1” and sounds a tone for each count. *Workout Review* displays for 20 seconds (default setting) or until you press the **Stop** key.

NOTE: Speeding up and slowing down of the Arc Trainer is dependent on the user speeding up and slowing down.

! WARNING: Wait until foot plates come to a complete stop before dismounting.

11. Wait until foot plates come to a complete stop before dismounting the unit. Hold the handrails to steady yourself while you step off the unit.
12. The unit returns to *Dormant Mode*.

Stopping the Arc Trainer

Press **Stop** once to pause your workout for 20 seconds (default setting) and to enter the *Workout Review*. As you stop striding the foot plates will stop and the elevation will return to the level 3 incline (starting position), but all workout settings and data will remain in memory for the pre-selected time. Press the **Quick Start** key within the default setting to continue your workout. If the **Quick Start** key has not been pressed during the 20 second pause, workout data will be cleared and the display will change to *Dormant Mode*.

Press **Stop** a second time to interrupt workout data from cycling and to change the display to *Dormant Mode*.

NOTE: *Speeding up and slowing down of the Arc Trainer is dependent on the user speeding up and slowing down.*

! WARNING: *Wait until foot plates come to a complete stop before dismounting.*

Emergency Dismount: Follow the steps listed below if you experience pain, feel faint or need to stop your unit in an emergency situation:

1. Grip handrails for support.
2. Stop striding.
3. Wait until the foot plates come to a complete stop.
4. Continue holding the handrails while you step off the unit.

Control During Operation

Control keys on the display are usable during operation and may be pressed at any time to make adjustments in resistance, incline or data readouts.

Changing Resistance — Press the **Resistance + –** keys to change the load in increments of 1. Minimum to maximum resistance is from 0-100. **NOTE:** *During a Manual Mode or Quick Start workout the ▲▼ keys temporarily revert to resistance keys.*

Changing Incline — Press the **Incline ↑↓** keys to change the elevation in increments of 1 from 0-10. The elevation rises in the shape of an arc ranging from 12 to 34.5 degrees. See *Range of Motion* in this chapter.

Changing Level — You can change the level during a programmed workout. Press the **Level** key to display the current program and level status. Then press

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▲▼ keys to change the level. The level will change immediately and will continue to accumulate performance data without interruption. **NOTE:** *If you change the level during the Manual Mode the level and resistance will change at once.*






Changing Programs — When changing programs, your data from the previous program will transfer only when changing from one program to manual mode. You cannot transfer data when changing from one program to another program or from *Manual Mode* to a program.

Changing Workout Time — Press **Time** to alter the amount of time you plan to workout. You can change **Time** before or during a workout. **NOTE:** *The Max default time may limit your time. See Setting Operation Options in chapter 5.*

Changing Data Readouts — Press **Scan** once to continue to display a set of data. Press **Scan** again and it will continually review each set of data. **NOTE:** *The automatic scan is a feature that can be toggled and/or turned on or off. See Setting Operation Options in chapter 5. If Scan is off, your heart rate will still appear when a heart beat is detected.*

Data Readouts

As you exercise, the Arc Trainer keeps track of the following data:

	Distance — The total accumulated distance, in miles or kilometers, during your workout. NOTE: <i>Depending on the defaults you've chosen this measurement will show in English or Metric.</i>
	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.
	Metabolic Equivalent — 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 an individual consumes 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. See <i>The Workout Profile</i> in this chapter for more information.
	Strides Per Minute — Your average number of strides per minute at your current speed.
	Heart Rate — Your current heart rate. Heart rate will appear when a signal is introduced. Use either the handgrips for Contact Heart Rate or a Polar compatible heart rate transmitter. See <i>Heart Rate LED</i> for a description of colors.

To review accumulated data after a program: The display automatically cycles through your accumulated workout data during the *Workout Review* for 20 seconds (default setting). **NOTE:** Heart rate is not displayed during a *Workout Review*.

Displaying Heart Rate

In order to display your heart rate, you must either use a Polar compatible heart rate transmitter belt (not included) or hold the handgrips to use Contact Heart Rate.

Contact Heart Rate — Hold the handgrips on the console crossbar until a heart rate is displayed, typically less than thirty seconds. For best results, hold the handgrips lightly and ensure that your hands contact both the front and back sensors of each grip. **NOTE:** *Hold your hands as steady as possible as movement can cause interference on the contacts. Cybox does not recommend continuous holding onto the contact heart rate grips during exercise.*

Factors that can interfere with the heart rate signal include:

- excessive movement
- body composition
- hydration
- too loose grip
- too tight grip
- excessive dirt, powder or oil
- resting or leaning on the 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. Therefore, ensure you have clean hands when using the contact heart rate.

Polar Compatible Reception — To use this feature, a Polar compatible heart rate transmitter belt must be worn. To view heart rate continuously, press the **Scan** key when the Heart LED is lit or press the **Heart** key. **NOTE:** *When wearing a Polar compatible transmitter, the contact heart rate will dominate only when the grips are held.*

Heart Rate LED

When the handgrips are held the center display switches to show the heart rate in beats per minute (BPM) if you are not scanning. For several seconds the display will show “---”. Once the actual heart rate is determined the center window displays the BPM and the Heart LED lights up. See Figure 2. The color of the light represents a scale of low to high target heart rate.

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Blue = 0-69 beats per minute
 Green = 70-93 beats per minute
 Yellow = 94-120 beats per minute (FAT BURN ZONE)
 Red = 121-170 beats per minute (CARDIO ZONE)
 Purple = 171 & up beats per minute

NOTE: A label is on the unit to remind you what the color represents while you are working out. See Figure 2.

Use of Programs

! 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.

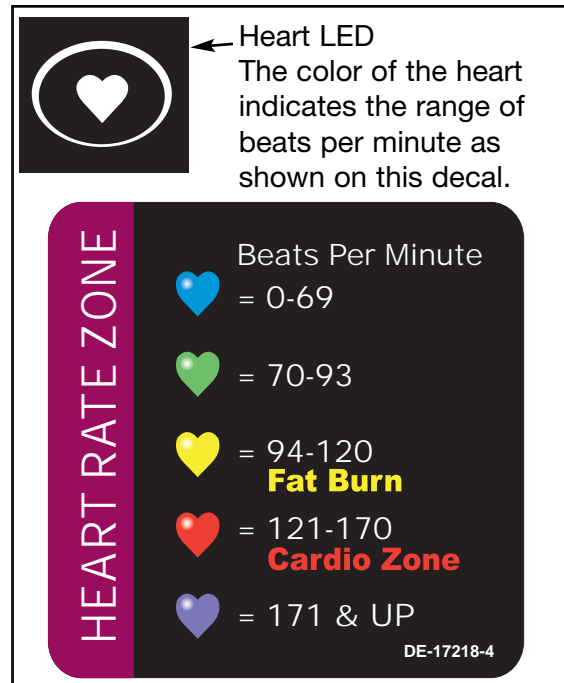
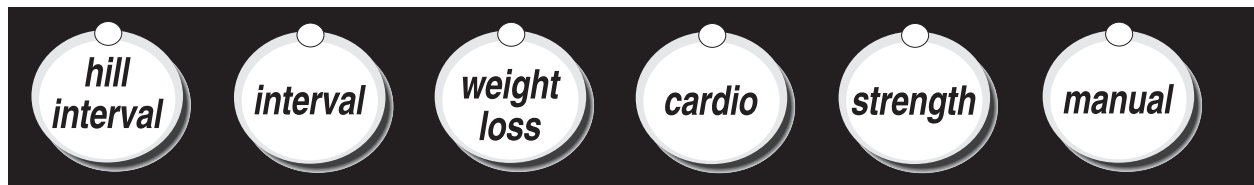


Figure 2

With the Arc Trainer, you may choose from six different programs. Five of the programs provide ten levels of difficulty for a choice of fifty different preprogrammed options. You may also use *Manual Mode*. With this unique combination of programs, you can tailor your workout to achieve exactly the fitness goals you desire, including: weight loss, conditioning, endurance or maintenance of overall health. Speed is never predetermined for you; you can change your speed simply by changing your stride. The program choices are summarized as follows:

Quick Start	No levels	Skip setup and control speed, incline, and time as you go.
Hill Interval	10 levels	Control speed and time. Level dictates incline and resistance.
Interval	10 levels	Enter time desired. Level dictates incline and resistance.
Weight Loss	10 levels	Enter time desired. Level dictates incline and resistance.
Cardio	10 levels	Enter time desired. Level dictates incline and resistance.
Strength	10 levels	Enter time desired. Level dictates incline and resistance.
Manual	No levels	Enter time desired. Control incline and resistance as you go.



Manual Mode

Manual Mode is not a preprogrammed workout. Instead, it allows you to choose settings as you workout. You may choose your settings according to how you feel or your endurance level. Since you remain in control, *Manual Mode* may be the best choice for beginners or for those who have not worked out in a long time.

Press the **Quick Start** key to workout in *Manual Mode*. To increase or decrease the resistance while in *Manual Mode* use the **Resistance + -** keys. To increase or decrease the incline while in *Manual Mode* use the **↑↓** arrows.

When you workout in *Manual Mode*, be sure to include a three-to-five minute warm-up and cool-down period. You can warm-up by setting a low resistance at zero incline and then gradually increase the incline and resistance to the target for your workout. Reverse this process for your cool-down period, lowering the resistance gradually and returning the incline to zero.

The Workout Profile

The Workout Profile matrix in the center of the display uses columns of lights to show the progress of your workout. The height of the column represents METS, specifically the highest METS you reached in that period. Each column represents 1 minute of your total workout time when in *Manual Mode* and 15 seconds in every other program.

NOTE: *It is conceivable to have two segments of different speed and elevation combinations in the same met range.*

Range of Motion

Press the **Incline ↑↓** keys to change the elevation in increments of 10%. The elevation rises or lowers in the shape of an arc ranging from 12 to 34.5 degrees (with the chord of an arc). Depending upon the incline you choose the primary and secondary muscles trained will vary. See Figure 3.

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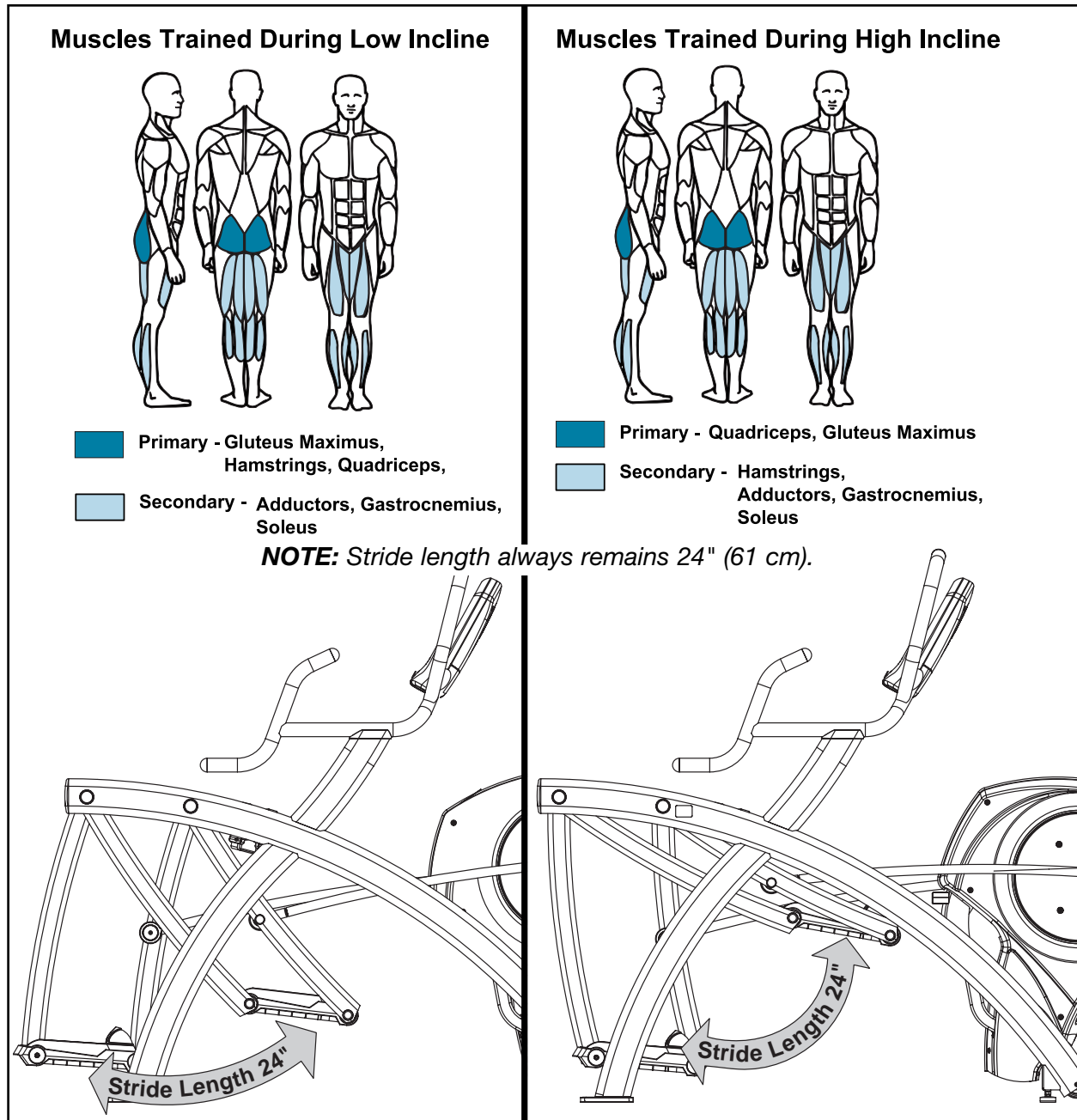


Figure 3

Hill Interval

Program Overview

The Hills program is designed to give the user the experience of hiking in a hilly terrain. This program uses intervals of moderate resistance and incline to simulate relatively flat areas and intervals of substantially greater incline and resistance to simulate steeper grades. Likewise the two-minute work segments are intended to tax the users capabilities, while the two-minute rest allows for recuperation and allows for repeated work segments. See table on the next page and Figure 4.

Hills

Time Segments	:30 :30 :30 :30				2:00 2:00 2:00 2:00				:30 :30 :30 :30			
	Warm Up				Program Segments				Cool Down			
Resistance	1	2	3	4	1	2	1	2	1	2	3	4
Program Level 10	20	25	30	35	40	60	40	60	35	30	25	20
9	20	25	30	35	40	50	40	50	35	30	25	20
8	15	20	25	30	35	45	35	45	30	25	20	15
7	15	20	25	30	35	40	30	40	30	25	20	15
6	15	15	20	25	30	35	25	40	25	20	15	15
5	15	15	20	25	30	25	35	35	25	20	15	15
4	10	10	15	20	25	30	30	30	20	15	10	10
3	10	10	15	20	25	25	25	30	20	15	10	10
2	10	10	10	15	20	20	20	25	15	10	10	10
1	10	10	10	10	15	15	15	20	10	10	10	10

Incline	Warm Up				Program Segments				Cool Down			
	1	2	3	4	1	2	1	2	1	2	3	4
Program Level 10	3	4	5	6	6	10	6	10	6	5	4	3
9	3	3	4	5	5	10	5	10	5	4	3	3
8	3	3	4	5	5	9	5	9	5	4	3	3
7	3	3	3	4	4	9	4	9	4	3	3	3
6	3	3	3	4	4	8	4	8	4	3	3	3
5	3	3	3	3	3	8	3	8	3	3	3	3
4	3	3	3	3	3	7	3	7	3	3	3	3
3	2	2	3	3	3	7	3	7	3	3	2	2
2	2	2	3	3	3	6	3	6	3	3	2	2
1	2	2	3	3	3	6	3	6	3	3	2	2

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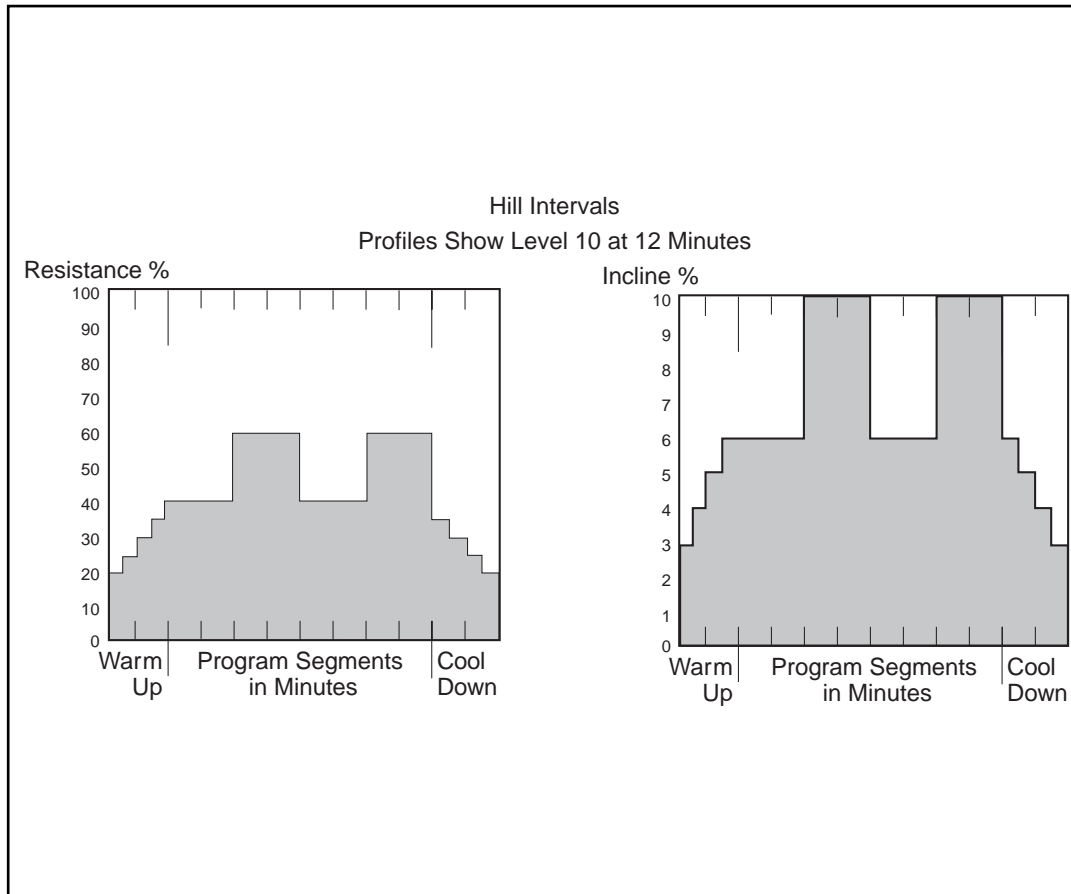


Figure 4

Interval

Program Overview

The Interval program utilizes a 1:2 (work:rest) ratio with the work period lasting for 30 seconds. This allows for moderate and balanced taxation of both the aerobic and anaerobic energy systems. As such this program is useful to those who desire improving both their aerobic and anaerobic capabilities. This program maintains a steady incline throughout. The use of low to moderate incline ensure that the gluteus maximus will be the prime mover. See table below and Figure 5.

Interval

Time Segments	:30				:30				:30				:30				:30			
	Warm Up				Program Segments												Cool Down			
Resistance	1	2	3	4	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	4
Program Level 10	35	45	55	65	70	45	45	70	45	45	70	45	45	70	45	45	40	35	30	20
9	35	40	50	60	65	40	40	65	40	40	65	40	40	65	40	40	35	30	25	15
8	30	40	50	55	60	35	35	60	35	35	60	35	35	60	35	35	30	25	20	15
7	30	35	45	50	55	30	30	55	30	30	55	30	30	55	30	30	30	25	20	10
6	25	35	40	45	50	30	30	50	30	30	50	30	30	50	30	30	30	25	20	10
5	25	30	35	40	45	25	25	45	25	25	45	25	25	45	25	25	25	20	15	10
4	20	25	30	35	40	25	25	40	25	25	40	25	25	40	25	25	25	20	15	10
3	20	25	30	30	35	20	20	35	20	20	35	20	20	35	20	20	20	15	10	10
2	15	20	25	30	30	20	20	30	20	20	30	20	20	30	20	20	20	15	10	5
1	10	15	20	20	25	15	15	25	15	15	25	15	15	25	15	15	15	15	10	5

Incline	Warm Up				Program Segments												Cool Down			
	1	2	3	4	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4
Program Level 10	2	2	3	4	5	5	5	5	5	5	5	5	5	5	5	5	4	3	2	2
9	2	2	3	4	5	5	5	5	5	5	5	5	5	5	5	5	4	3	2	2
8	2	2	3	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	2
7	2	2	3	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	2
6	2	2	3	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	2
5	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2
4	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2
3	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

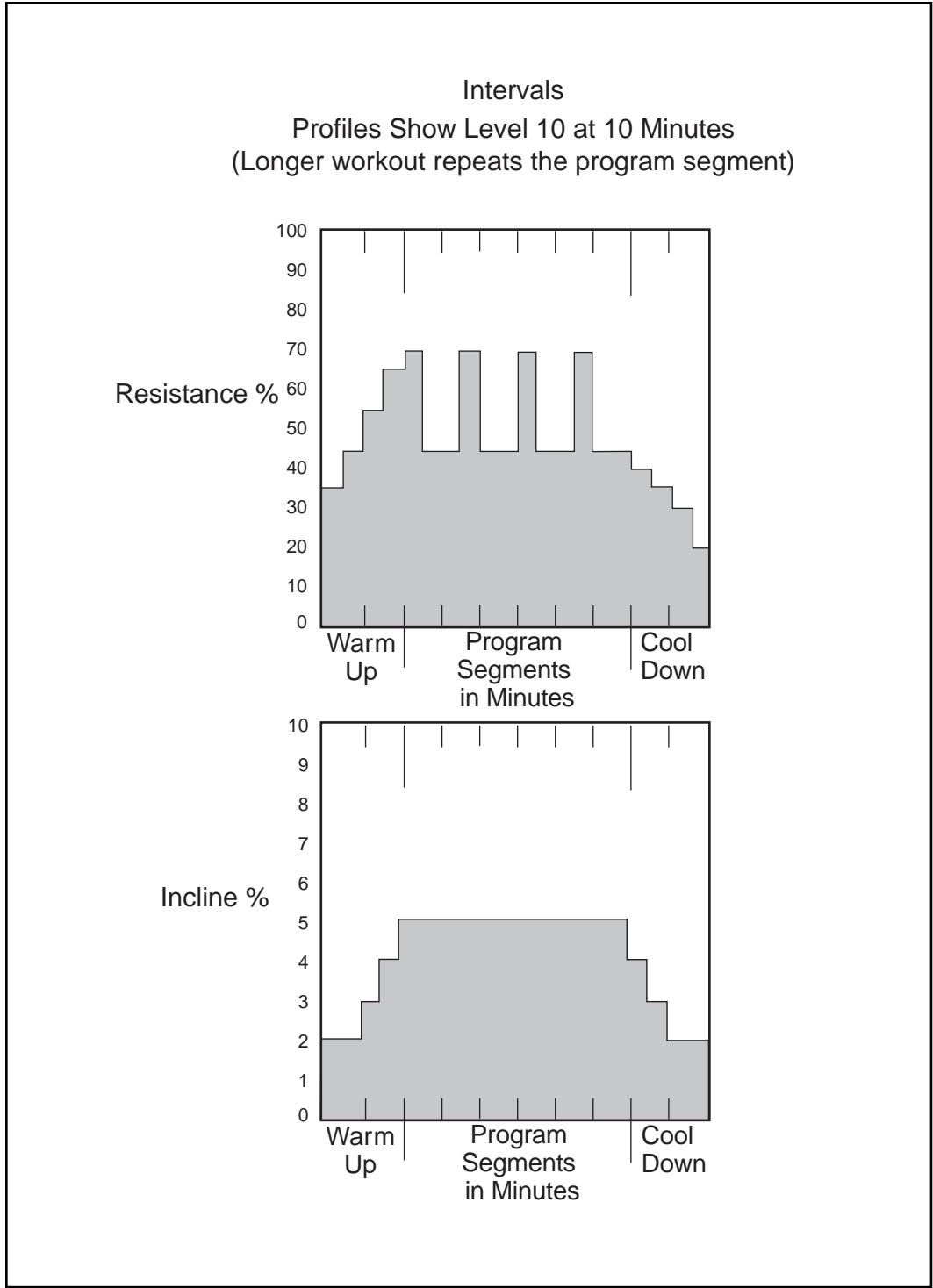


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Weight Loss

Program Overview

The Weight Loss program is designed for low to medium intensity training that the user can sustain for an extended period of time. It builds from a low intensity baseline to include segments of higher incline and resistance as well as segments that use higher resistance with the baseline incline. The constant variety provides for periods of higher expenditure and training effect without the introduction of undue fatigue allowing the user to perform for longer periods of time. See table below and Figure 6.

Weight Loss

Time Segments	:30				1:00					:30				
	Warm Up				Program Segments					Cool Down				
Resistance	1	2	3	4	1	2	3	4	5	1	1	2	3	4
Program Level 10	5	10	15	20	25	45	45	25	40	25	20	15	10	5
9	5	10	15	20	25	40	40	25	40	25	20	15	10	5
8	5	10	15	20	25	35	35	25	35	25	20	15	10	5
7	5	5	10	15	25	40	40	25	30	25	15	10	5	5
6	5	5	10	15	25	35	35	25	20	25	15	10	5	5
5	5	5	10	15	25	30	30	25	20	25	15	10	5	5
4	0	0	5	10	0	25	25	0	20	0	10	5	0	0
3	0	0	5	10	0	20	20	0	10	0	10	5	0	0
2	0	0	0	5	0	10	10	0	0	0	5	0	0	0
1	0	0	0	0	0	10	10	0	0	0	0	0	0	0

Incline	Warm Up				Program Segments					Cool Down				
	1	2	3	4	1	2	3	4	5	1	1	2	3	4
Program Level 10	4	4	4	4	4	6	6	4	4	4	4	4	4	4
9	4	4	4	4	4	6	6	4	4	4	4	4	4	4
8	3	3	3	3	3	6	6	3	3	3	3	3	3	3
7	3	3	3	3	3	4	4	3	3	3	3	3	3	3
6	3	3	3	3	3	4	4	3	3	3	3	3	3	3
5	3	3	3	3	3	4	4	3	3	3	3	3	3	3
4	2	2	2	2	2	3	3	2	2	2	2	2	2	2
3	2	2	2	2	2	3	3	2	2	2	2	2	2	2
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1	2	2	2	2	2	3	3	2	2	2	2	2	2	2

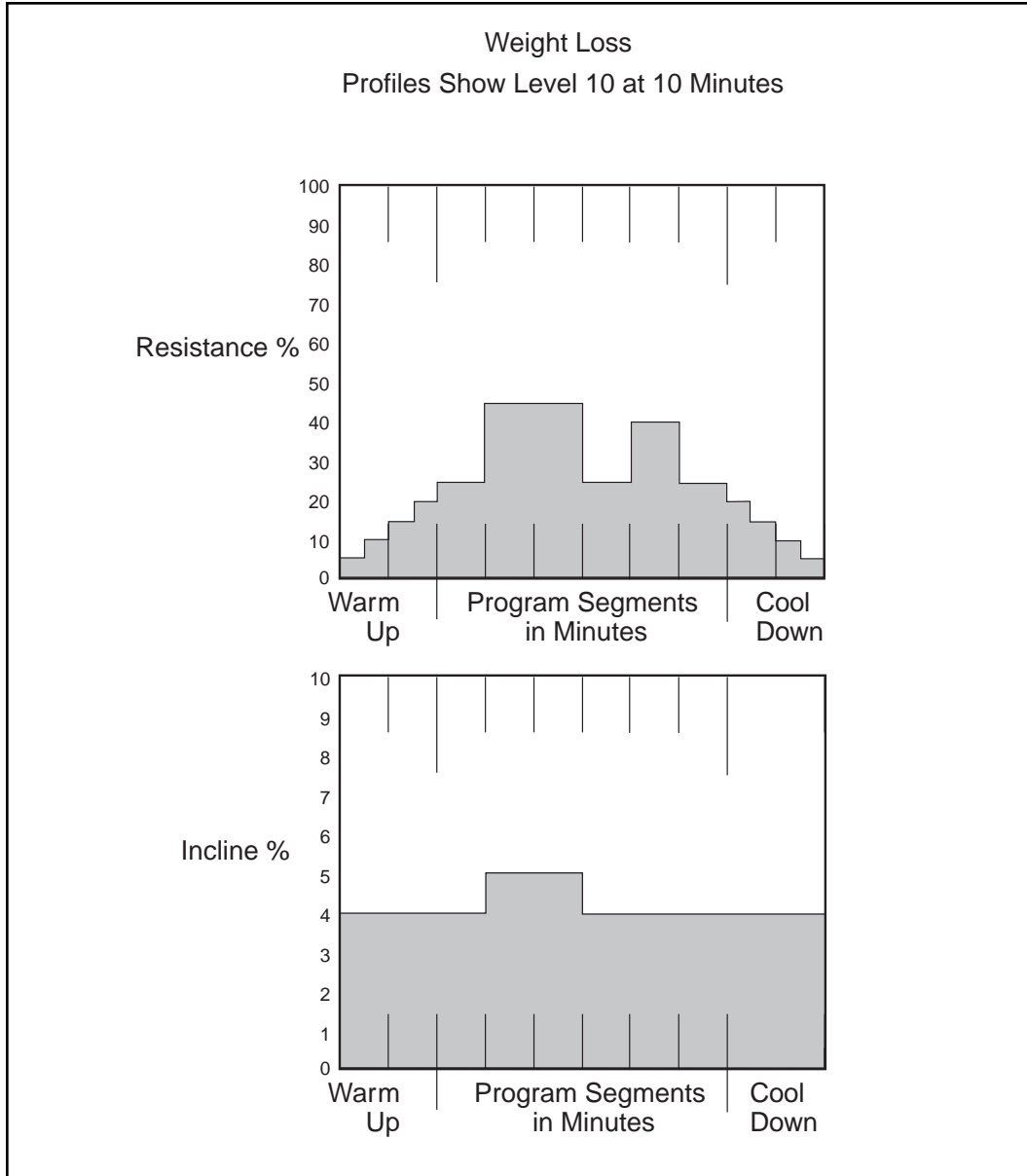


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Cardio

Program Overview

The Cardio program is designed for experienced users that desire a high intensity cardiovascular training experience. The two-minute work interval with high resistance ensures that the aerobic energy system is completely taxed, while the subsequent two-minute rest interval allows for recovery enabling a repeat at the higher work rate. Additionally, a higher incline level is used during the recovery interval to discourage blood pooling, ensuring more complete recovery. See table below and Figure 7.

Cardio

Time Segments	:30				2:00		2:00		:30			
	Warm Up				Program Segments			Cool Down				
	1	2	3	4	1	2	1	1	2	3	4	
Resistance												
Program Level 10	30	35	45	55	80	60	80	55	45	35	30	
9	25	35	45	55	75	55	75	55	45	35	25	
8	25	30	40	45	70	50	70	45	40	30	25	
7	20	25	35	40	65	45	65	40	35	25	20	
6	15	20	30	35	60	40	60	35	30	20	15	
5	15	20	25	30	55	35	55	30	25	20	15	
4	10	15	20	25	50	30	50	25	20	15	10	
3	5	10	15	20	45	30	45	20	15	10	5	
2	0	5	10	15	40	25	40	15	10	5	0	
1	0	0	5	10	35	20	35	10	5	0	0	

Incline	Warm Up				Program Segments			Cool Down			
	1	2	3	4	1	2	1	1	2	3	4
	Program Level 10	3	4	5	6	5	8	5	6	5	4
9	3	3	4	5	5	8	5	5	4	3	3
8	3	3	4	4	5	7	5	4	4	3	3
7	3	3	4	4	4	7	4	4	4	3	3
6	3	3	3	4	4	6	4	4	3	3	3
5	3	3	3	3	4	6	4	3	3	3	3
4	2	2	2	3	3	5	3	3	2	2	2
3	2	2	2	3	3	5	3	3	2	2	2
2	2	2	2	2	2	4	2	2	2	2	2
1	2	2	2	2	2	4	2	2	2	2	2

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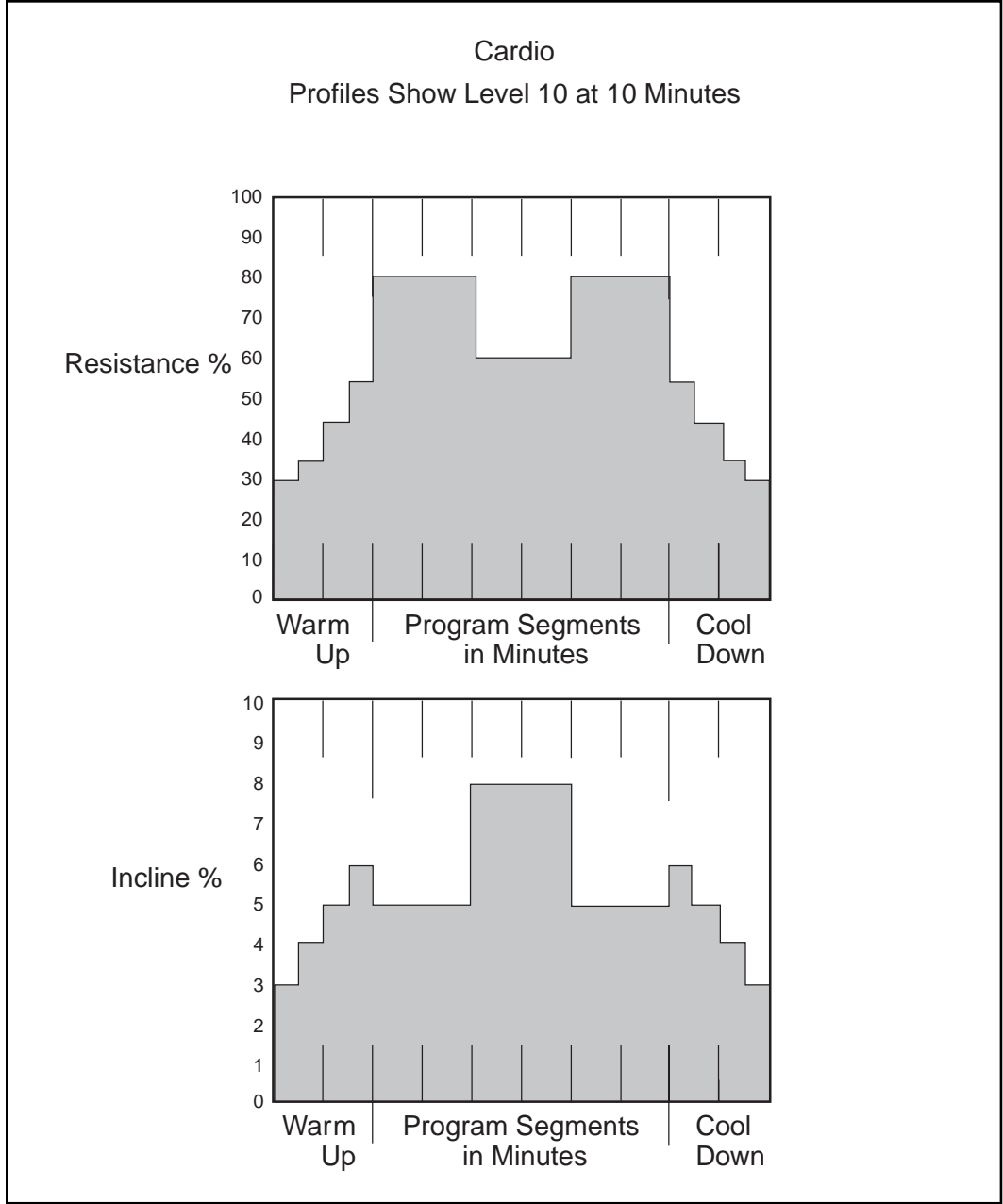


Figure 7

Strength

Program Overview

The program is designed with the specific goal of taxing the anaerobic energy system and encouraging maximal power development. This program uses a 1:3 (work:rest) ratio having 15-second work periods. The work periods use high resistance settings to maximally tax their anaerobic energy system and rest periods with very low resistance to encourage recuperation. Additionally, this program uses high incline settings to encourage contribution for the whole leg for maximal power production. See table below and Figure 8.

Strength

Time Segments	:30				:15				:15				:15				:15				:15				:15				:30							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Resistance	Warm Up				Program Segments																Cool Down															
Program Level 10	50	65	80	90	100	35	35	35	100	35	35	35	100	35	35	35	100	35	35	35	100	35	35	35	100	35	35	35	100	35	35	35	30	25	20	15
9	50	60	75	85	95	35	35	35	95	35	35	35	95	35	35	35	95	35	35	35	95	35	35	35	95	35	35	35	95	35	35	35	30	25	20	15
8	45	60	70	80	90	35	35	35	90	35	35	35	90	35	35	35	90	35	35	35	90	35	35	35	90	35	35	35	90	35	35	35	30	25	20	15
7	45	55	70	75	85	30	30	30	85	30	30	30	85	30	30	30	85	30	30	30	85	30	30	30	85	30	30	30	85	30	30	30	25	20	20	15
6	40	50	65	70	80	30	30	30	80	30	30	30	80	30	30	30	80	30	30	30	80	30	30	30	80	30	30	30	80	30	30	30	25	20	20	15
5	35	50	60	65	75	30	30	30	75	30	30	30	75	30	30	30	75	30	30	30	75	30	30	30	75	30	30	30	75	30	30	30	25	20	15	10
4	35	45	55	65	70	25	25	25	70	25	25	25	70	25	25	25	70	25	25	25	70	25	25	25	70	25	25	25	70	25	25	25	20	20	0	0
3	35	40	50	60	65	25	25	25	65	25	25	25	65	25	25	25	65	25	25	25	65	25	25	25	65	25	25	25	65	25	25	25	20	20	0	0
2	30	40	50	55	60	20	20	20	60	20	20	20	60	20	20	20	60	20	20	20	60	20	20	20	60	20	20	20	60	20	20	20	15	0	10	5
1	30	35	45	50	55	20	20	20	55	20	20	20	55	20	20	20	55	20	20	20	55	20	20	20	55	20	20	20	55	20	20	20	15	0	10	5

Incline	Warm Up				Program Segments																Cool Down											
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Program Level 10	5	6	8	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	8	6	5
9	5	6	8	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	8	6	5
8	5	6	7	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	7	6	5
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6	5	6	7	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	7	6	5
5	4	5	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	6	5	4
4	4	5	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	6	5	4
3	4	5	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	6	5	4
2	3	4	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	5	4	3
1	3	4	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	5	4	3

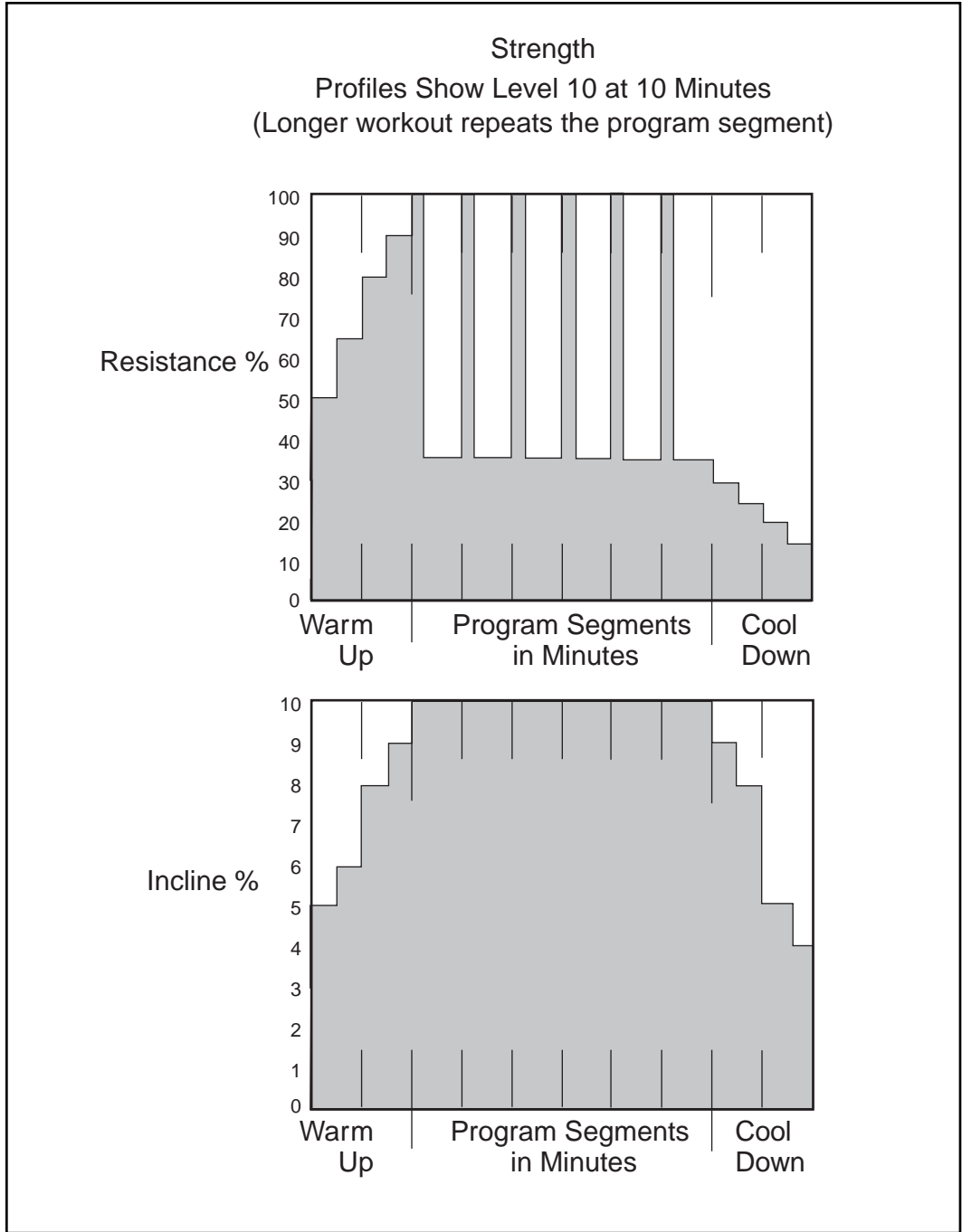


Figure 8

3 Operation

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Manual

Program Overview

Manual Mode is available both through **Quick Start** and through the **Manual** program where it includes the program time and user weight adjustment. **NOTE:** *There is no diagram because resistance and incline are user-controlled.*

4 - Preventive Maintenance

Warnings/Cautions

All warnings and cautions listed in this chapter are as follows:

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

! WARNING: To prevent electrical shock, be sure that power is shut off and the unit is unplugged from the electrical outlet before performing any cleaning or maintenance procedures.

! WARNING: Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged. Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

! WARNING: The flywheel may be hot. Wait until it cools before servicing.

Regular Maintenance Activities

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

Preventive maintenance activities must be performed to maintain normal operation of your unit. Keeping a log of all maintenance actions will assist you in staying current with all preventive maintenance activities. See *Service Schedule* located at the end of this chapter.

NOTE: Worn or damaged components shall be replaced immediately or the unit removed from service until the repair is made.

NOTE: Cybox 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.

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Cleaning Your Cybex Arc Trainer

! WARNING: To prevent electrical shock, be sure that power is shut off and the unit is unplugged from the electrical outlet before performing any cleaning or maintenance procedures.

When cleaning your unit spray a mild cleaning agent, such as a water and dishsoap solution, on a clean cloth first and then wipe the unit with the damp cloth.

NOTE: Do not spray cleaning solution directly on the unit. Direct spraying could cause damage to the electronics and may void the warranty.

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 on the console and display overlays, 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 unit. Cleaning this area should be done as often as indicated in the *Service Schedule*.

! WARNING: Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged. Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

To clean inside the unit, remove the four Phillips head screws securing the access cover in place. Use a vacuum attachment or hand vacuum to clean the exposed elevation assembly and remove dirt and debris off of internal components.

Use a *dry* cloth to wipe all exposed areas. Replace the access cover and secure it with the screws when finished.

Lift the rear of the unit and roll it back from its present position to vacuum the floor area underneath the unit. When finished, return the unit 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 alcohol. The grips are the only part of the unit you should use a cleaning solution containing alcohol.

Drive Belt Maintenance

There are two drive belts that may become loose, worn or cracked. See Figure 1.

Primary Belt — This is the wider of the two belts. It has grooves that keep it aligned on the large upper pulley. Unless the unit has been serviced and not put back together properly, it is *unlikely* that the primary belt will need to be re-tensioned.

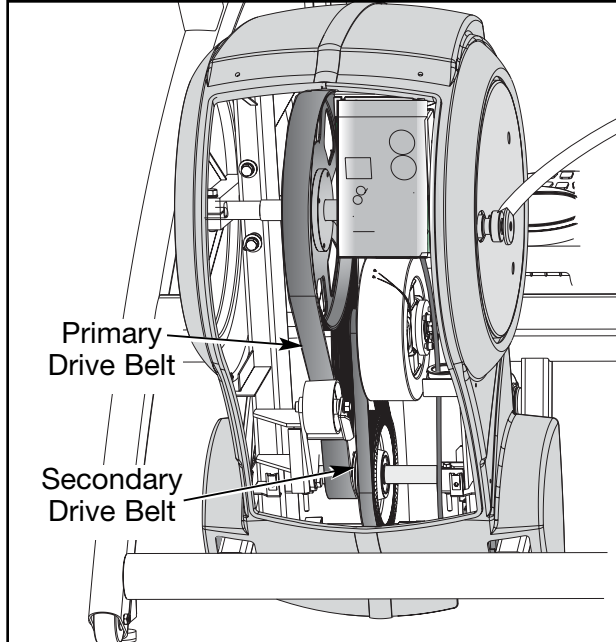


Figure 1

Secondary Belt — This is the narrower of the two belts. It has grooves that keep it aligned on the flywheel's drive pulley. It is *unlikely* that the secondary belt will become loose because it is a stretch-fit belt. Unless the unit has been worked on and not put back together properly, it is *unlikely* the tension will change.

Follow this *Drive Belt Maintenance* procedure to ensure that the belts are tensioned properly and in good condition. See the *Service Schedule* in this chapter for a minimum schedule for checking the belt tension and condition.

NOTE: To remove and replace the belts a qualified service technician should follow the *Drive Belts* procedure in the *Service* chapter.

Tools Required

- Phillips head screwdriver

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

1. Read and understand this *Drive Belt Maintenance* section thoroughly before proceeding to step 2.
2. Disconnect the external power source.
 - A. Turn the main power switch above the power inlet to the off (O) position.
 - B. Unplug the power cord from the power outlet.

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3. Remove the access cover.

- A.** Using a Phillips head screwdriver, remove the four screws securing the access cover in place. See Figure 2.
- B.** Remove the access cover.

! WARNING: The flywheel may be hot. Wait until it cools before servicing.

3. Check the condition of each belt.

- A.** Roll each belt by pulling down on it. Examine the condition of each belt. If a belt has cracks or appears worn it should be replaced.
NOTE: The part numbers are BD-16671 for the primary drive belt and BD-17021 for the secondary drive belt. To remove and replace the belts a qualified service technician should follow the *Drive Belts* procedure in the *Service* chapter.

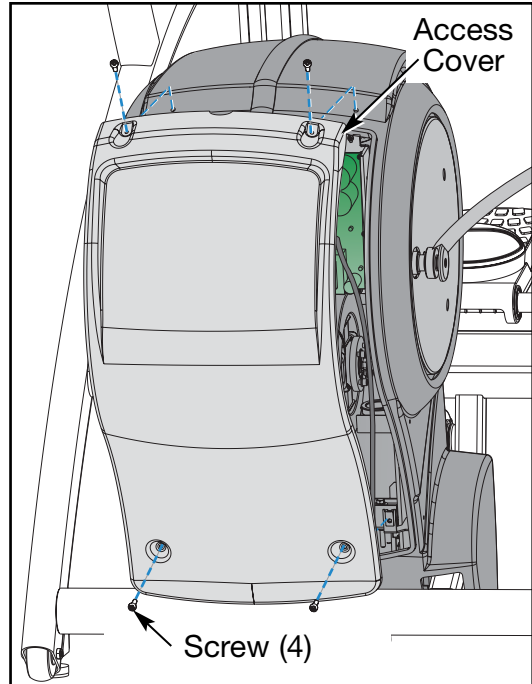


Figure 2

4. Check the tension of the primary belt.

- A.** Press on the primary belt with your hand. You should not feel any “give” in the primary belt. If the belt “gives”, a qualified service technician should follow the *Drive Belts* procedure in the *Service* chapter.

5. Check the tension of the secondary belt.

- A.** Press on the secondary belt with your hand. The belt should “give” about 1/4” (0.6 cm). If the belt has too much “give”, a qualified service technician should follow the *Drive Belts* procedure in the *Service* chapter.
- B.** Locate the spacers under the lower pivot shaft. Visually check that the spacers are in place and in good condition. If the spacers are visibly cracked or missing, a qualified service technician should follow the *Drive Belts* procedure in the *Service* chapter. See Figure 3.

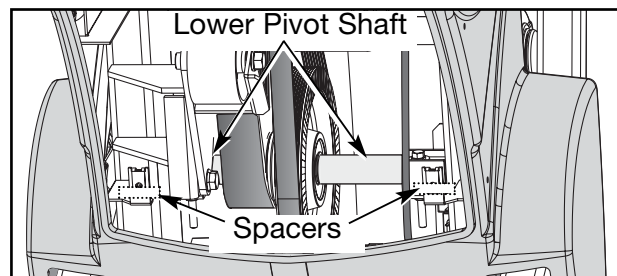


Figure 3

Lubrication

The Arc Trainer is designed with no-maintenance parts. Although there are grease fittings on the pillow blocks, re-lubrication of the bearings is not required.

Elevation Motor Lubrication — In time the elevation motor pivot points may develop a squeak. If a squeak is present, a qualified service technician should remove the elevation motor by following the *Elevation Motor* procedure in the *Service* chapter. Lubricate the upper and lower bolts and the spacers with a small amount of lithium grease. **NOTE:** *Lithium grease is available at most auto parts stores.*

Locating a Squeak — In the unlikely event that a squeak may develop, you should first lubricate the elevation motor pivot points as described above. If the squeak continues, check that the primary and secondary belts have not become misaligned. If the machine has been damaged, a squeak may come from the moving parts, such as the foot plate arms or linkage rods. In this case, the damaged parts should be replaced by following the appropriate procedure in the *Service* chapter.

Environment of the Arc Trainer

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 unit. You may experience a shock due to the build-up of static electricity on your body and the discharge path of the unit. If you experience this type of situation, you may want to increase the humidity to a comfortable level through the use of a humidifier.

Humidity — Do not install 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 machine.

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Service Schedule

WARNING

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

Service Schedule

NOTE: This is the minimum recommended service.

Determine mileage.

1. Enter *Test Mode* by holding down any key while turning the unit to the on (I) position.
2. Then press *dist*

First 500 Miles

A Check drive belts for tension & wear.

Every 5000 Miles

A Check drive belts for tension & wear.

B Move unit and vacuum underneath.

C Remove access cover to clean inside - use dry cloth & vacuum.

Every 20,000 Miles

D Check elevation assembly & replace worn parts.

E Lubricate elevation bushings.

Date	Mileage	Service	Initials

5 - Setup & Assembly

Warnings/Cautions

All warnings and cautions listed in this chapter are as follows:

! WARNING: Use extreme caution when assembling the unit. Failure to do so could result in injury.

! CAUTION: A minimum of two people are required to lift, move and assemble this unit. Always use proper lifting methods when moving heavy items.

! WARNING: 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.

! WARNING: Wait until all moving parts come to a complete stop before dismounting.

Choosing & Preparing a Site

Before assembling the unit you must select a suitable site and have 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 your voltage requirements.

The area you select for the unit should be well lit and well ventilated. Locate the unit on a structurally sound and level surface. Allow enough clearance for safe access and passage during use of the unit. Allow a minimum of 5" (13 cm) behind the unit for the elevation to rise. If the unit is to be located above the first floor, place it near or above major support beams. To protect the carpeting, place a 3/4" (1.9 cm) thick wood base under the unit. Be sure to use the rubber foot covers shown on page 5-7.

Do not install 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 machine.

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Electrical Power Requirements

The power requirements for the Cybex Arc Trainer are a grounded circuit rated for one of the following: 115 VAC $\pm 5\%$, 50/60 Hz and 15 amps; or 230 VAC $\pm 10\%$, 50/60 Hz. Contact your electrician to ensure the power supply complies with local building codes. **NOTE:** Do not use a ground plug adapter to adapt the 3-prong power cord plug to a non-grounded electrical outlet.

Up to three units can be daisy-chained together for single outlet use; order part number 367EW345 for each unit. The daisy-chain outlet is rated 115v 50/60Hz 4A (or 230v 50/60Hz 5A outside of the United States).

Assembling the Arc Trainer

! WARNING: Use extreme caution when assembling the unit. Failure to do so could result in injury.

! CAUTION: A minimum of two people are required to assemble this unit.

Tools Required

- Phillips head screwdriver
- Hex key, 3/16" (supplied)
- 9/16" Open-end wrench

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

1. Read and understand all instructions thoroughly before assembling the unit.

NOTE: Each step number in the assembly instructions tells you what you will be doing. The lettered steps following each step number describe the procedure required. Do not continue with step 2 until you have carefully read all of the assembly instructions.

2. Verify you have received the correct package.

- A. Read the sticker on the outside of the box and verify that the model number and voltage are what you ordered.

3. Unpack and verify the contents of the boxes.

- A. Lift up and remove the cardboard sleeve that surrounds the unit.
- B. Verify that you have the color that you ordered by looking at the paint.
- C. Verify that you have the correct voltage by reading the voltage sticker near the power inlet.

D. Check to be sure that the following items are present. Check off (✓) each item as you find it. See Figure 1. If any of the parts are missing contact Cybox Customer Service.

Item	Qty	Part Number	Description
<input type="checkbox"/> 1	1	Varies	Base with covers attached
<input type="checkbox"/> 2	1	AC-17320-4	Console assembly (in box)
<input type="checkbox"/> 3	2	HX-17053	Gasket, handrail trim (in box)
<input type="checkbox"/> 6	1	PL-17209	Water bottle holder (in box)
<input type="checkbox"/> 8	2	11090-392	Foot cover (in box)
<input type="checkbox"/> 9	1	AW-14007	Power cord (in box)
<input type="checkbox"/> NA	1	AX-17110	Hardware pack (in box)
<input type="checkbox"/> NA	1	LT-17070-4	Owner's & Service Manual (in box)
<input type="checkbox"/> NA	1	LT-17071	Assembly poster
<input type="checkbox"/> NA	1	600A-301	Warranty sheet

NOTE: NA means not applicable.

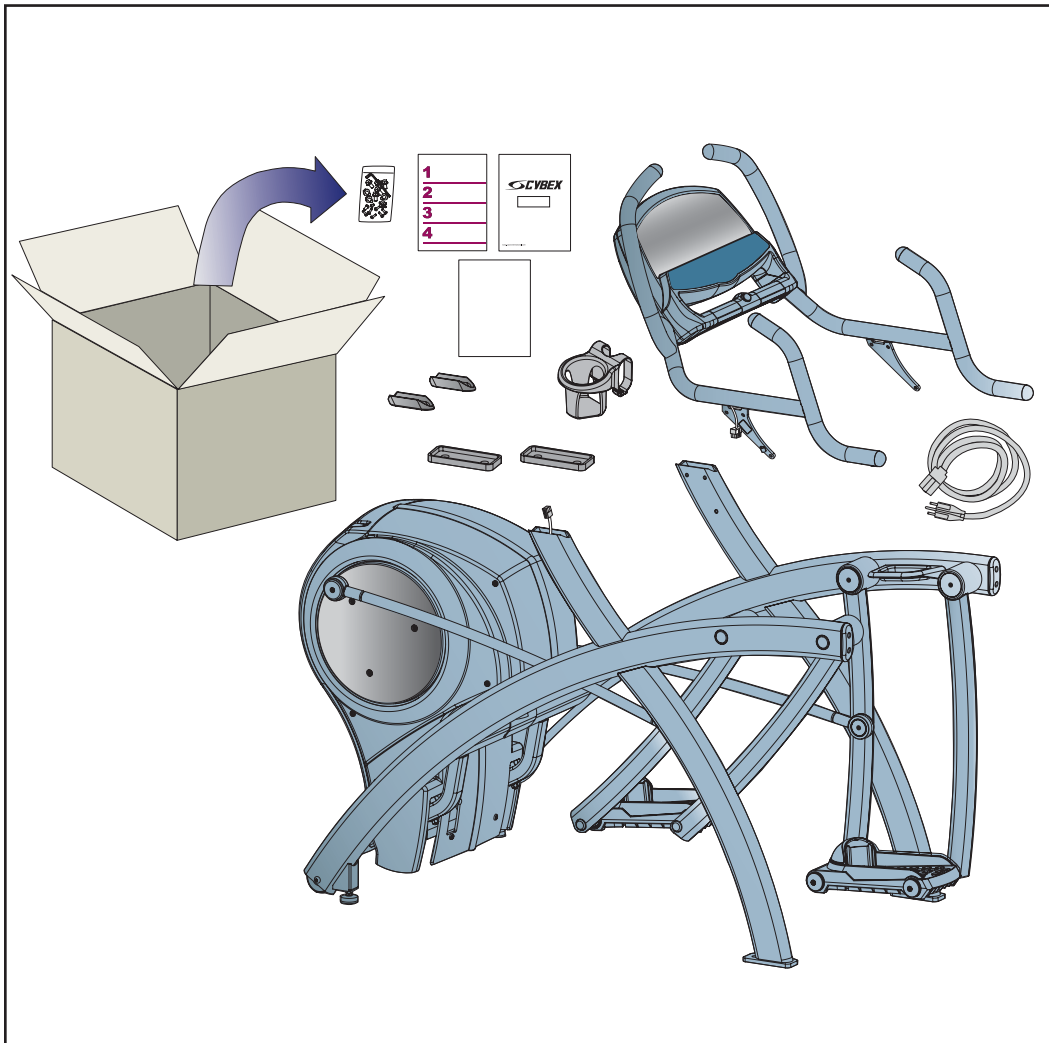


Figure 1

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E. Check off (☑) each item in the hardware pack as you find it. See Figure 2.

Item	Qty	Part Number	Description
<input type="checkbox"/> 4	4	HC660417	BHSCS 5-16-18 x 1.00
<input type="checkbox"/> 5	4	HS327300	Lock washer external tooth
<input type="checkbox"/> 7	2	HT552515	Screw, 5-16-18 x 0.75 PNHD ACR Phil
<input type="checkbox"/> NA	1	BK030201	Hex key, 3/16"

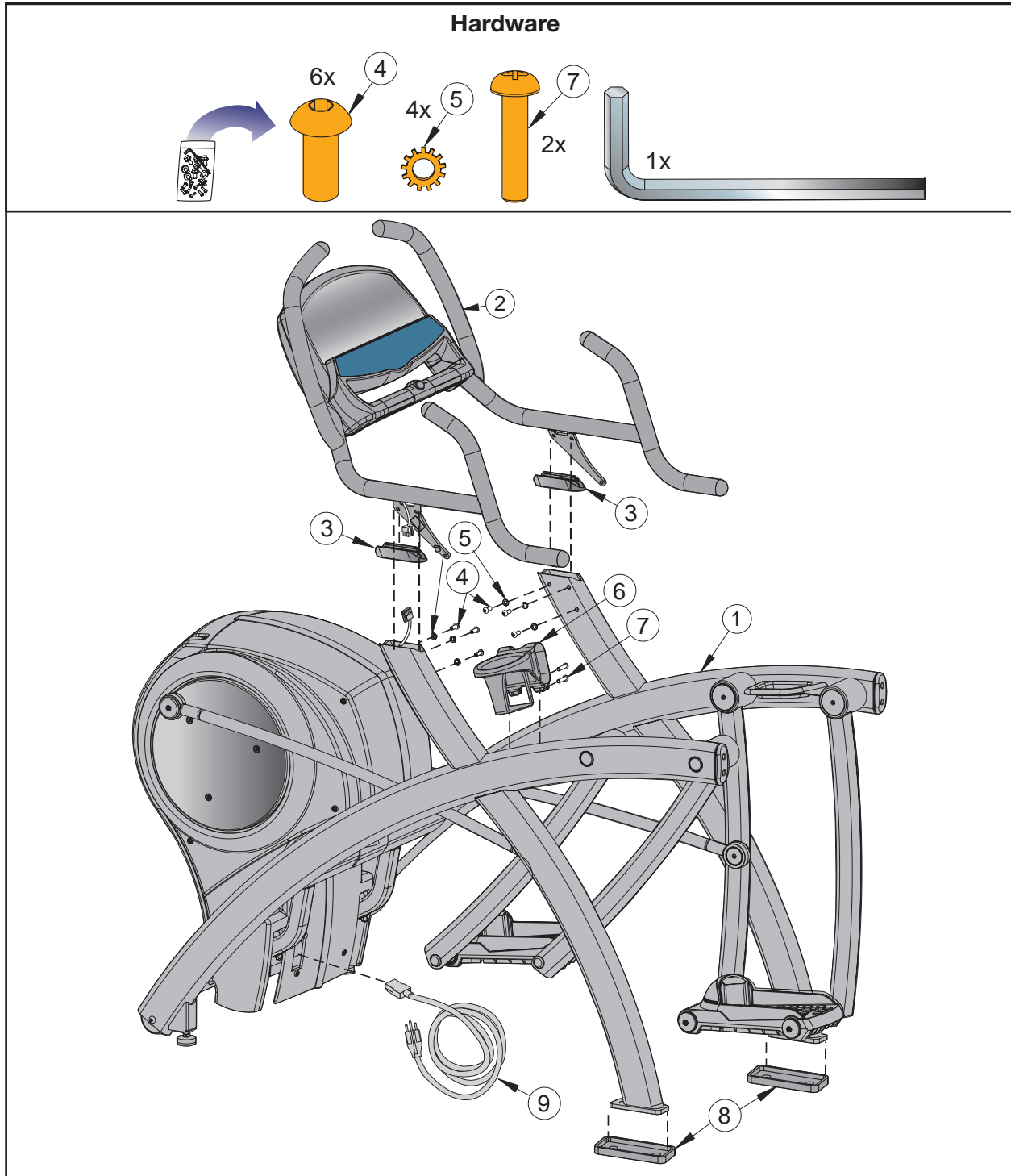


Figure 2

! CAUTION: *A minimum of two people are required to lift, move and assemble the unit. Always use proper lifting methods when moving heavy items.*

4. Lift and move the unit.

- A. At least two people should lift and move or roll the unit to the location where you intend to leave it. Use proper lifting methods.

5. Connect the display cable.

- A. Remove the display cable from the rubber band (discard rubber band).
- B. Route the lower display cable through one of the two gaskets. See Figure 3.
- C. Place the gasket on top of the upright tube but do not attach at this time.
- D. Place the second gasket on top of the other upright tube but do not attach at this time.

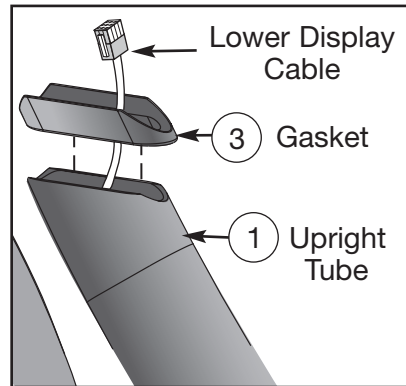


Figure 3

- E. Have a second person hold the console over the upright tubes and gaskets until step 6C. See Figure 4.

- F. Connect the upper display cable to the lower display cable. See Figure 4.

6. Attach the handrail.

- A. Ensure that the display cable does not get pinched in step 6B.
- B. Lower the console onto the gaskets and continue to hold it steady. **NOTE:** *Confirm that no cables are pinched lowering the console.*

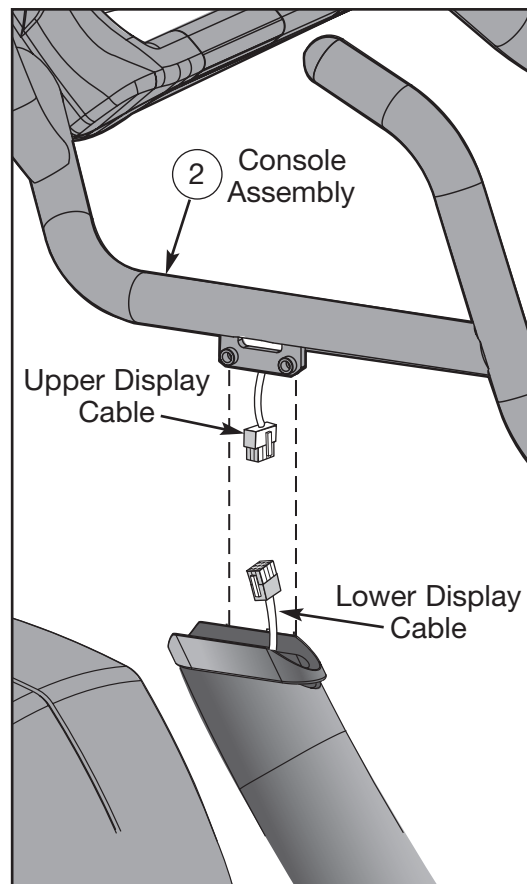


Figure 4

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C. Using a 3/16" hex key, loosely attach the console with the four 5-16-18 x 1.00 screws and four starwashers. **NOTE:** Do not securely tighten the screws until step 6D. See Figure 5.

D. Confirm that the handrail, gaskets and screws are aligned and then tighten the four screws.

7. Attach the water bottle holder.

A. Hold the water bottle holder with two hands and gently pull outward and continue to pull (hold open) during step 7B. See Figure 6.

B. Place the water bottle holder over the frame with the larger side outside of the frame as shown in Figures 6 and 7. **NOTE:** Water bottle holder may be placed on either side.

C. Using a Phillips head screwdriver, attach the water bottle holder to the frame with the two 5-16-18 x 0.75 screws. See Figure 7. **NOTE:** Do not overtighten.

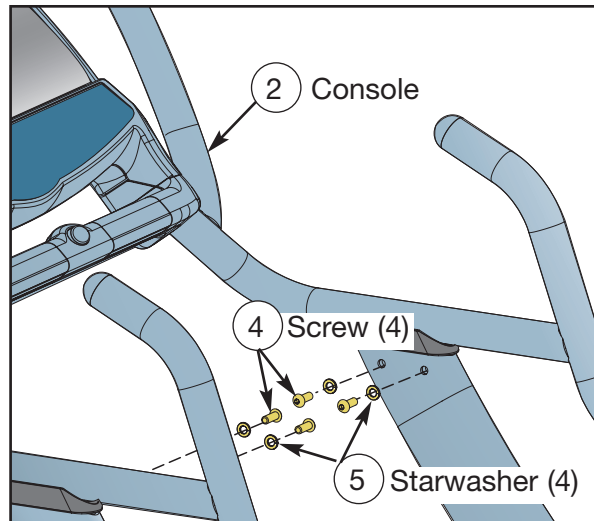


Figure 5

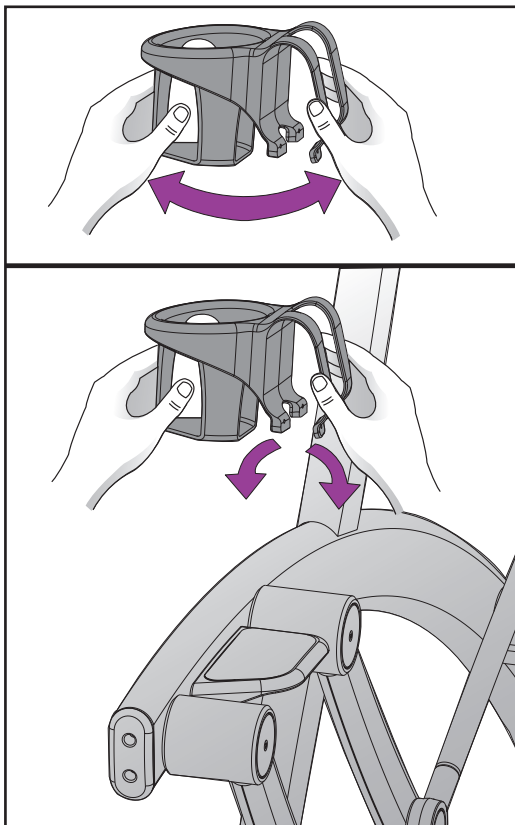


Figure 6

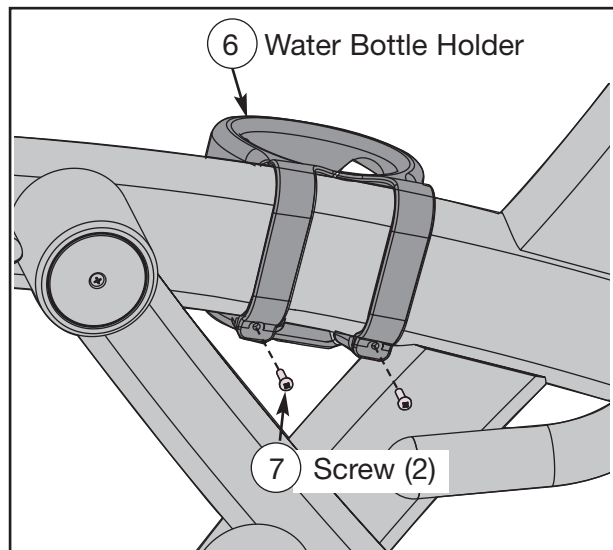


Figure 7

8. Attach the foot covers.

- A. Remove the paper backing from the tape on each foot cover.
- B. Have one person lift the unit while a second person adheres a foot cover on each of the two back feet. See Figure 8.

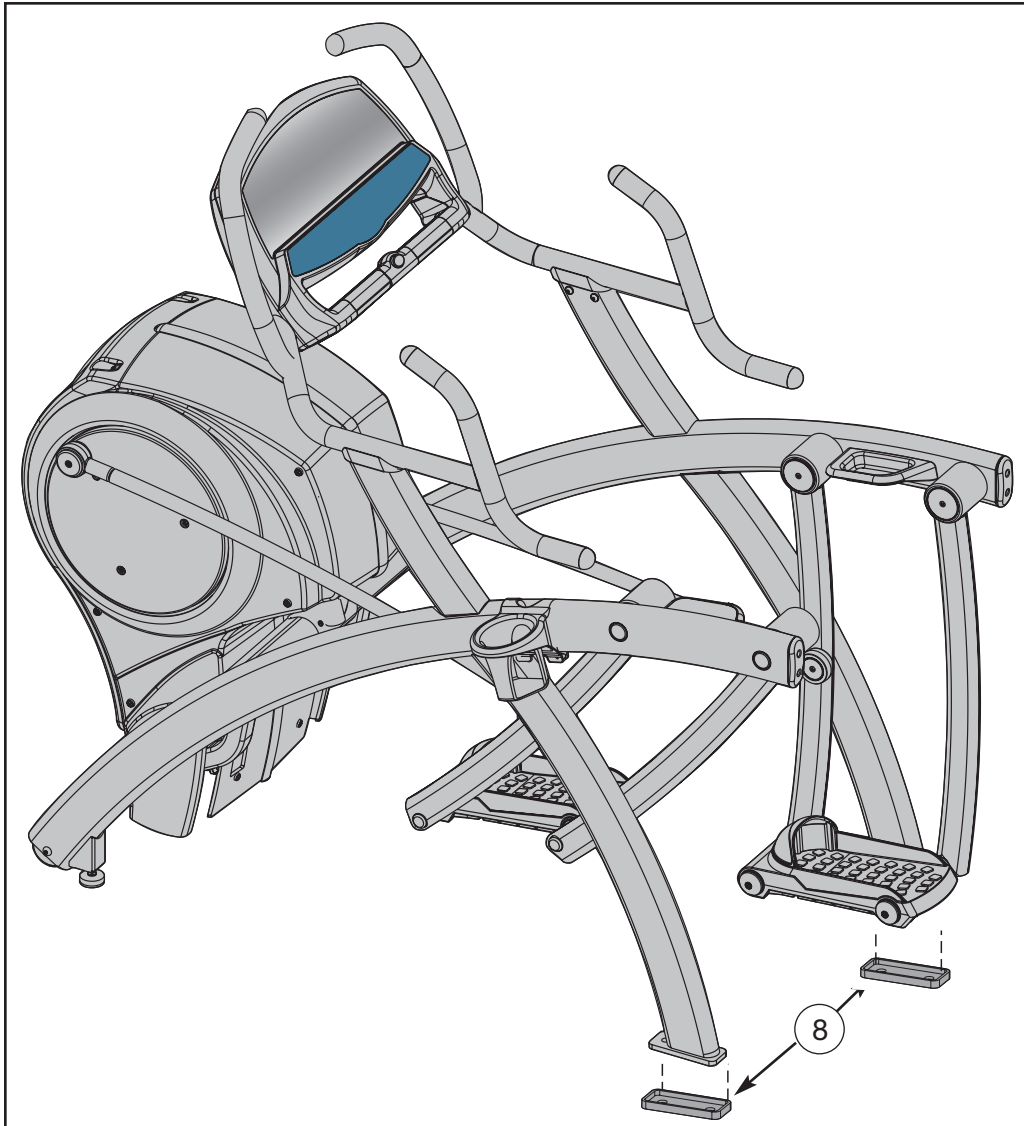


Figure 8

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9. Level the unit.

- A. Confirm that the unit is on a level surface. If it is not, use a 9/16" open-end wrench to adjust the leveling feet up or down. See Figure 9.

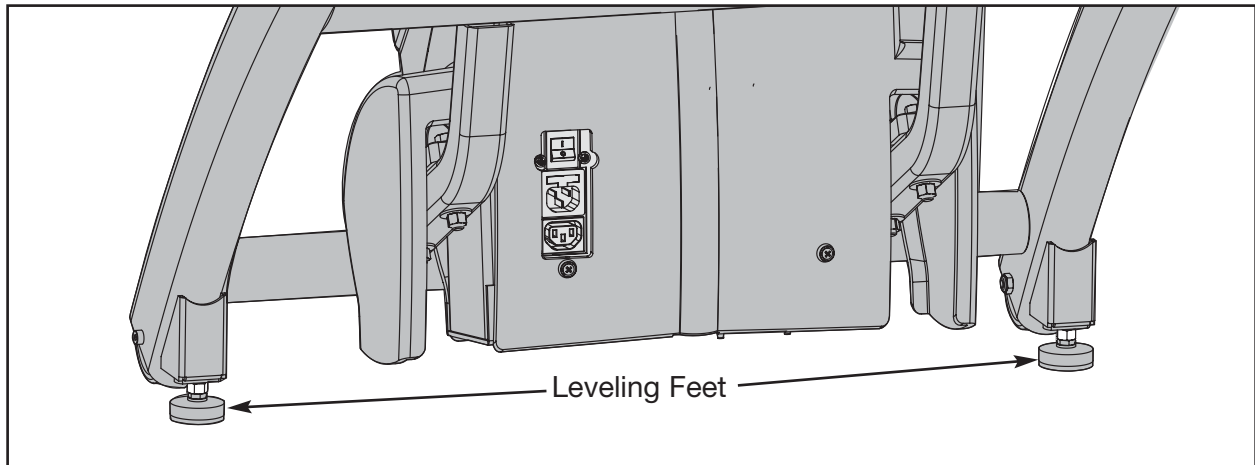


Figure 9

10. Connect the power cord.

- A. Plug the power cord into the inlet near the on/off switch. **NOTE:** Do not plug the power cord into an outlet at this time. See Figure 10.

11. Visually inspect the unit.

- A. Carefully examine the unit to ensure that the assembly is correct and complete.

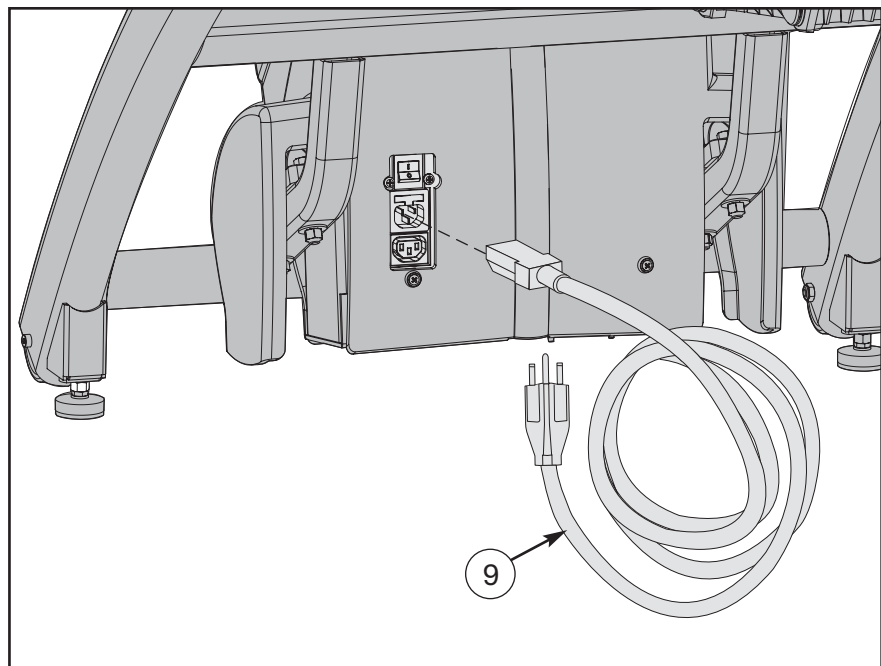


Figure 10

! WARNING: *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 the Operation

Use the following instructions to test the full resistance and incline range of the unit.

1. Plug the power cord into a power outlet from a grounded circuit as described under *Electrical Requirements* in this chapter. **NOTE:** *Coil up the remainder of the power cord and place it out of the way, under the front of the Arc Trainer.*
2. Locate the on/off (I/O) power switch near the power cord inlet. Toggle it to the on position (I).
3. The control panel will light up and be in the *Dormant Mode*.

NOTE: *Cybox recommends that the unit be unplugged or the on/off (I/O) power switch turned off (O) when it is not in use.*

4. Hold the handrails to steady yourself while you step into the foot plates.
5. Press the **Quick Start** key. The unit begins a countdown "3...2...1" and sounds a tone for each count. After it reaches one (1), the unit gives a longer tone.
6. Begin striding.
7. Run the unit through its full resistance range. First press the **Resistance +** key until the unit reaches its highest load (the display will show "100"). Then press the **Resistance -** key until the unit reaches its lowest load; the display will show "0". As you stride, you will feel the resistance change.

NOTE: *When the unit reaches the set incline and resistance, the displays will stop flashing and remain steadily illuminated to indicate that the desired settings have been reached.*

8. Run the unit through its full incline range. First press the **Incline ↑** key until the unit reaches its highest incline (the display will show "10"). Then press the **Incline ↓** key until the unit reaches its lowest incline (the display will show "0").

! WARNING: *Wait until all moving parts come to a complete stop before dismantling.*

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9. Press **Stop** twice to bring the incline back to its start position, end the workout review, and return the display to *Dormant Mode*.
10. Wait until foot plates come to a complete stop before dismounting the unit. Hold the handrails to steady yourself while you step off the unit.

Setting Operation Options

1. Enter *Test Mode* by holding down any key while turning on (I) power. The display will read "Arc".

NOTE: After changing any value, you must press **Enter** to save that value. When you press enter the display will read "updt" (updated) to confirm your selection.

2. Press the **Weight** key to set options, change values with ▲ and ▼ keys and press **Enter** to save your selection. Each time you press **Weight** the next set of data is displayed in the following order:

Unit — Choices are "Eng" (English) or "Euro" (metric) measurements. English is the default.

Line: — This is the frequency of the power line that supplies power to your unit. The default setting is 50 Hz for metric consoles and 60 Hz for English consoles. **NOTE:** If you have an English console and a 50 Hz power line frequency, then you must change the default setting from 60 Hz to 50 Hz for the proper elevation frequency.

Scan — This turns on or off the data readout scan (unless a specific data key is pressed during a workout). Default is on.

Def — This is the default time for time based programs if a user doesn't re-set **Time**. For example, if you press **Time** you can decrease or increase the set workout time up to the amount that the **Max** time is set. Choices (in minutes) include: 20, 30, 40, 50 and 60. Default is 20.

Max: — This is the maximum amount of time the unit can run per use. You can limit the users time or choose "none" for unlimited time. Choices (in minutes) include: 20, 30, 40, 50, 60, 90, 120 and "none" for no time limit. Default is 60.

Idle (or Workout Review): — This is how long the unit retains and displays your current workout data during a pause in the workout or after a workout. Choices include: 20 seconds; 30 seconds; 40 seconds; 1 minute and 5 minutes; default is 20 seconds.

Remember: You must press **Enter** after changing a value for that value to be stored.

3. To exit *Test Mode* press the **Stop** key once.

Your unit is now ready for use. Follow the instructions in the *Operation* chapter to learn how to operate the unit.

6 - Customer Service

Contacting Service

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

For Cybox customers living in the USA, contact Cybox Customer Service at **800-766-3211**.

For Cybox customers living outside of the USA, contact Cybox Customer Service at **508-533-4300** or fax **508-533-5183**.

Order parts and find information on the web at www.cyboxinternational.com or by email at techhelp@cyboxintl.com.

Serial Number & Voltage

Your serial number can be found on the front of the unit. Your voltage can be found near the power inlet. For your convenience record your serial number and voltage below so that you will have it ready if you call Cybox Customer Service.

Serial Number _____ Voltage _____

Return Material Authorization (RMA)

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

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

1. Call the Customer Service Hotline listed above for the return of any item that is defective.
2. Provide the technician with a detailed description of the problem you are having or the defect in the item you wish to return.

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Cybex Arc Trainer Owner's & Service Manual

3. Provide the model and serial number. The serial number is located on the front of the unit. The serial number begins with a letter, for example: R09-101331100.
4. 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 an RMA number and will send you an ARS label. The ARS label and RMA number must be clearly displayed on the outside of the package that contains the item(s) to be returned. Include a description of the problem, the serial number of the unit and the name and address of the owner in the package along with the part(s).
5. Forward the package through UPS to Cybex.
Attn: Customer Service Department
Cybex International, Inc.
10 Trotter Drive
Medway, MA 02053

NOTE: *Merchandise returned without an RMA number on the outside of the package or shipments sent C.O.D. 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 boxes 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 carrier's 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 noticed 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 date of delivery. Keep all shipping containers and packing materials: they will be needed as part of the inspection process. The carrier will provide you with an inspection report and the necessary forms for filing a concealed damage claim. Concealed damage is the carrier's responsibility.

Ordering Parts

Visit eCybox.com to shop for parts online or fax your order to **508-533-5183**. To speak with a customer service representative, call **800-766-3211** (for customers living within the USA) or **508-533-4300** (for customers outside the USA).



Cybex will void warranty if non-Cybex replacement parts are used.

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7 - Service

Warnings/Cautions

All warnings and cautions listed in this chapter are as follows:

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

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

! WARNING: Flywheel may be hot. Wait until it cools before servicing.

! CAUTION: Do not pinch your fingers between the belt and pulley during this procedure.

! WARNING: Failure to release the drive belt tension may cause personal injury and may damage the unit.

! WARNING: Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

! CAUTION: Pulley on eddy current brake is sharp. Wear work gloves to protect your hands.

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

For any service related concerns, call Cybex Customer Service at 800-766-3211 (for Cybex customers living within the USA). For customers living outside the USA, call 508-533-4300 or fax 508-533-5183.

NOTE: Read and understand each procedure thoroughly before servicing. Unless otherwise noted "right" and "left" denote user orientation for all procedures.

Test Mode

! CAUTION

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

Cybex will void warranty if non-Cybex replacement parts are used.

To enter **Test Mode** press and hold down any key on the display while turning the power switch to the on (I) position. When all keys are released "ARC" and the software revision "x.xx" are shown on the display. To exit **Test Mode** press **Stop**.

Stuck Key List

If **Test Mode** occurs without holding any keys, a key may be stuck closed or Error 7 may have occurred. You may need to replace the upper and/or lower display overlay. See Figure 1. If "KEY#" is displayed you can determine which key is stuck closed by referring to the number list below.

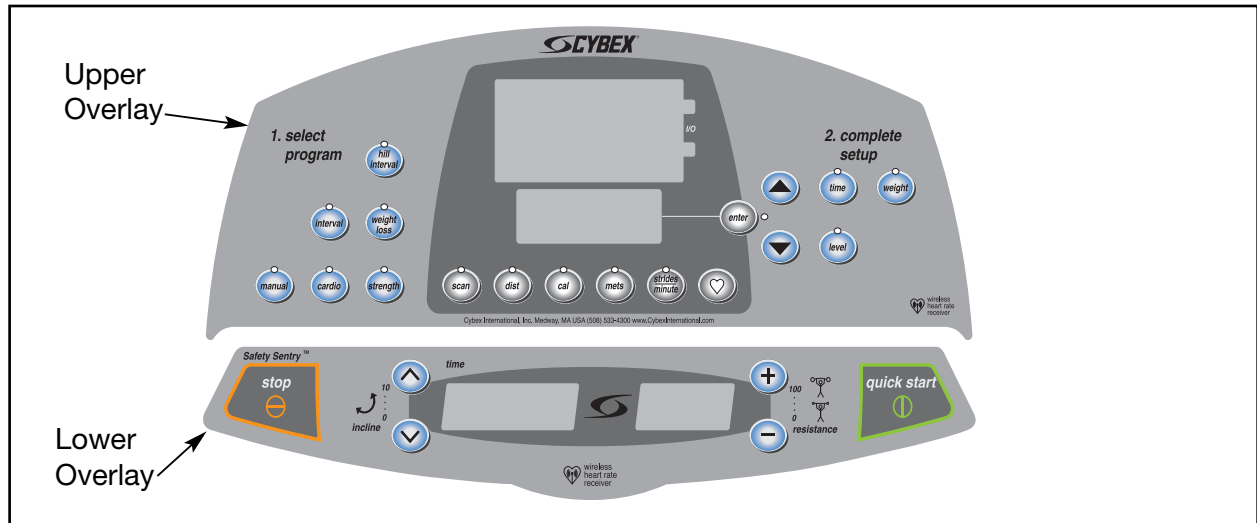


Figure 1

- | | | | |
|----------------|--------------|----------------|-----------------------|
| 1 Stop | 9 Incline Up | 15 Mets | 21 Hill Interval |
| 2 Incline Down | 10 Speed Up | 16 Interval | 22 Time |
| 3 Speed Down | 11 Start | 17 Enter | 23 Scan |
| 4 Weight | 12 Center Up | 18 Cardio | 25 Strides Per Minute |
| 5 Distance | 13 Strength | 19 Center Down | 26 Weight Loss |
| 7 Heart Rate | 14 Level | 20 Calories | |

LED Functions

LEDs are used to indicate the status of many of the unit inputs. After entering *Test Mode* refer to the following list to check that these LEDs are functioning properly:

- Heart LED** — Blinks on blue with every signal from the contact heart rate receiver and red for wireless signals (Polar).
- Weight LED** — Blinks on when CSAFE data is being received.
- Level LED** — Blinks on when CSAFE data is being transmitted.
- Lower Left Window** — The numbers indicate actual elevation. The decimal point before the numbers shows the activation of the level 3 position switch in the elevation motor (on above level 3). If dashes are shown in the display, the unit is either above or below the level 3 position switch, requiring it to be manually run through the switch to begin indicating actual elevation.
- Lower Right Window** — The numbers indicate resistance (0-100). The right most decimal point indicates the pulses from the speed sensor.

Key Functions

While in *Test Mode* press the following keys for desired information:

- Hill Interval key** — Lights all of the LEDs for a short period of time.
- Weight Loss key** — Lights only the columns.
- Strength key** — Lights only the rows.
- Incline ↑** — Run elevation motor up.
- Incline ↓** — Run elevation motor down.
- Resistance + (plus)** — Run resistance up.
- Resistance - (minus)** — Run resistance down.
- Distance** — Press *once* for odometer information (DST) to appear in the speed window.
Press *again* for hourmeter information (HRS) to appear in the speed window.
Press *three* times for number of starts information (USES) to appear in the speed window.
Press *four* times for number of positions the elevation (ELV) has ever moved.
Example: if a user runs the elevation from 2 to 3, 1 position is added to this number.
- Strides Per Minute** — Displays and cycles through error log. Up to 10 errors can be stored.
- Scan** — Clears error log when pressed twice while in error log mode.
- Mets** — Displays the torque in ft-lbs, (relative to LOAD).
- Calories** — Displays brake pulse width (PWM) value (the value of brake load in A/D counts). The number range is relative to brake current and goes from 0-200.
- Enter** — Required to save setup values.

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Error Codes

Error codes notify you of a problem condition and are displayed on the center of the console. These codes can also help to indicate the part of the unit most likely to be causing the problem. Errors that present a hazard to the user provide a measure of safety by causing a one second beep, stopping the unit and locking out operation of the unit.

A log of errors can be viewed and cleared. Up to 10 errors can be stored.

To enter *Test Mode*: Press and hold down any key on the display while turning the power switch to the on (I) position.

To view the Error Log: Press the **Strides Per Minute** key to display and cycle through error log; Press again to cycle to the next stored error.

To clear the Error Log: Press the **Scan** key twice.

To exit *Test Mode*: Press the **Stop** key.

NOTE: A processor upset can cause a bAd#. See F then G.

Error Description

bAd0	Bad checksum. See F then E.
bAd2	Internal RAM error. See F then E.
bAd3	Watchdog timeout. See F then E.
Err3	Speed sense lost. See A and B.
Err5	No index switch sense within timed limits. This is declared when the timed elevation reaches 0% without tripping the index. See D and A.
Err7	EEPROM error (memory lost, loads new defaults, enters <i>Test Mode</i>). See E.
ErrE	Index switch always on (or switch disconnected or wired backwards). This means that timed elevation has gone up 3 positions and the index is still sensed. See D.

Action

A	Check the lower board
B	Check the brake
C	Check the speed sensor and speed sensor disc
D	Check the elevation motor
E	Replace the display board if problem persists
F	Turn the power switch to the off (O) position and back on (I)

Speed Sensor Adjustment

Tools Required

- Phillips head screwdriver

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

1. Disconnect the external power source.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Unplug the power cord from the power outlet.

2. Remove the access cover.

- A. Using a Phillips head screwdriver, remove the four screws securing the access cover. See Figure 2.
- B. Remove the access cover.

3. Visually inspect the target disk on the lower pulley.

- A. Turn the lower pulley slowly and look for dirt, scratches or other damage on the target disk. See Figure 3. **NOTE: If the target disk or speed sensor is dusty use a soft dry cloth to wipe off the dust. A dirty, scratched or damaged disk may cause Error 3 to occur.**

4. Measure the speed sensor gap.

- A. Measure the gap between the speed sensor and the lower pulley. It should measure 3/16" (.48 cm) and should be parallel to the lower pulley. See Figure 3.

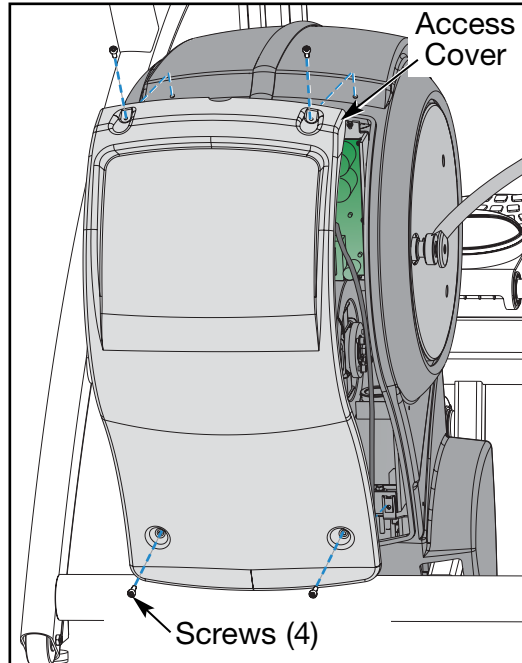


Figure 2

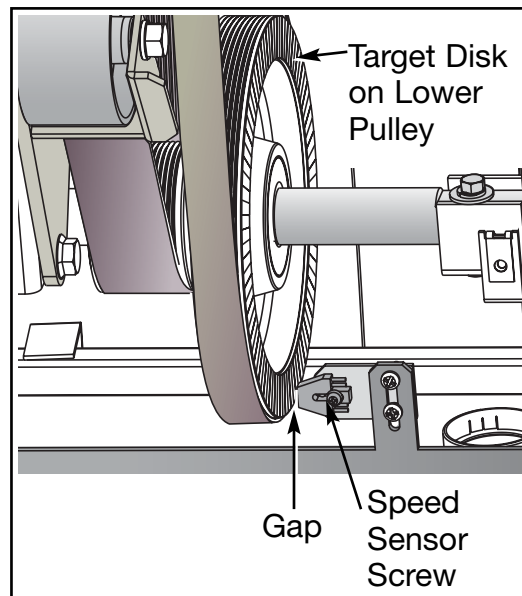


Figure 3

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5. Adjust the speed sensor gap (if needed).

- A. Using a Phillips head screwdriver, loosen the screw securing the speed sensor in place. See Figure 3. **NOTE:** *Gently bend the side cover to get at the speed sensor screw.*
- B. Adjust the gap between the speed sensor and the lower pulley to 3/16" (.48 cm) and tighten the screw. See Figure 3.

6. Test for speed errors.

- A. Connect the power cord to a power outlet.
- B. Enter *Test Mode*.

! WARNING: *Flywheel may be hot. Wait until it cools before servicing.*

! CAUTION: *Do not pinch your fingers between the belt and pulley during this procedure.*

- C. Slowly move the flywheel with your hand and check the speed LED on the lower board. It should blink as the target disk passes the sensor.
- D. Mount the unit and begin striding at a steady pace.
- E. While striding, take note of the speed that is displayed in the strides-per-minute display. This number should increase as you stride faster. If the number fluctuates greatly then your speed sensor gap may need to be readjusted or replaced.
- F. Press **Stop** and turn the power switch to the off (O) position.

7. Attach the access cover.

- A. While being sure not to pinch any cables, hold the access cover in place. See Figure 2.
- B. Using a Phillips head screwdriver, tighten the four screws securing the access cover.

Drive Belts

NOTE: This procedure will cover the primary and secondary drive belts.

Tools Required

- Phillips head screwdriver
- 3/16" Hex key
- 2 Cloths
- 3/8" Nutdriver or socket wrench
- 7/16" Socket wrench
- 1/2" Socket wrench (only if belt tension needs to be reset)
- 1/2" Open end wrench (only if belt tension needs to be reset)
- 3/8" Square-hole torque wrench (only if belt tension needs to be reset)

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

1. **Elevate the unit and disconnect the power source.**
 - A. Plug the power cord into the power outlet.
 - B. Enter *Test Mode*.
 - C. Elevate the unit to a minimum of level 7 incline.
 - D. While the unit is elevated, turn the main power switch to the off (O) position and unplug the power cord from the power outlet.
2. **Remove the access cover.**
 - A. Using a Phillips head screwdriver, remove the four screws securing the access cover. See Figure 2.
 - B. Remove the access cover.

! WARNING: Flywheel may be hot. Wait until it cools before servicing.

3. **Detach the connecting rods.**
 - A. Using a 3/16" hex key, remove the screw securing each connecting rod to each crank. See Figure 4.

NOTE: Detach only the ends where the rods connect to the crank.

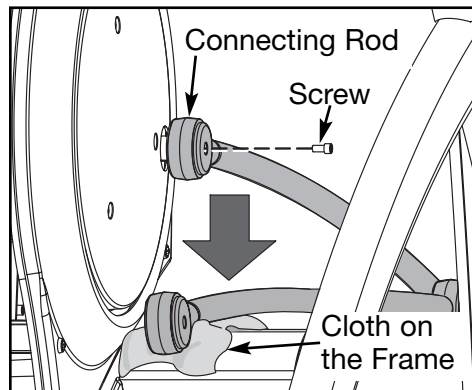


Figure 4

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B. Place a cloth on the frame where each connecting rod will rest.

C. Rest each rod on a cloth to prevent scratches. See Figure 4.

4. Remove the side covers.

A. Remove the six screws and six washers securing each side cover in place. See Figure 5.

B. Remove both side covers. **NOTE:** The gasket will come off with one of the side covers. See Figure 5.

5. Remove the crank covers.

A. Using a Phillips head screwdriver, remove the three screws securing each crank cover in place. See Figure 6.

B. Remove both crank covers.

! WARNING: Failure to release the drive belt tension may cause personal injury and may damage the unit.

6. Remove the lower pivot assembly.

A. Using a 7/16" socket wrench, remove the two screws, two lock washers and two flat washers from the lower pivot shaft. See Figure 7. **NOTE:** The tension is now released. The primary belt can be replaced without loosening the idler pulley.

NOTE: If you are not replacing the secondary belt, leave the lower pivot assembly loose in its place, skip steps 6B-8E and continue with step 9.

B. Remove the lower pivot assembly out of the secondary belt and from the frame. See Figure 8.

7. Remove the secondary belt (if applicable).

A. Slide the secondary drive belt off the unit and discard it.

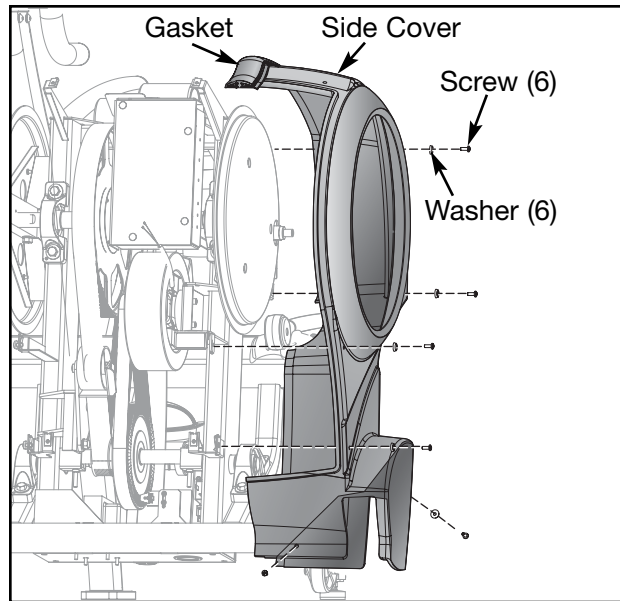


Figure 5

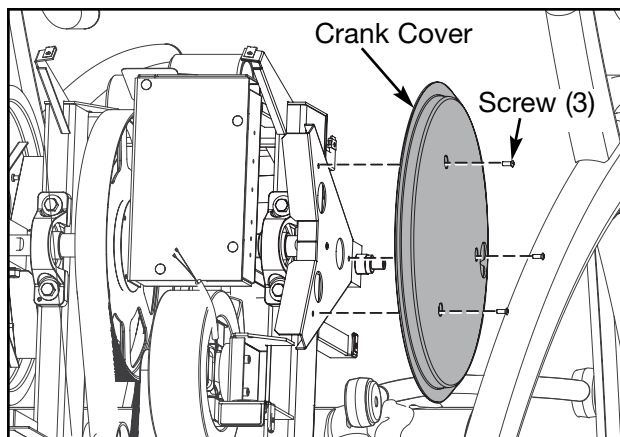


Figure 6

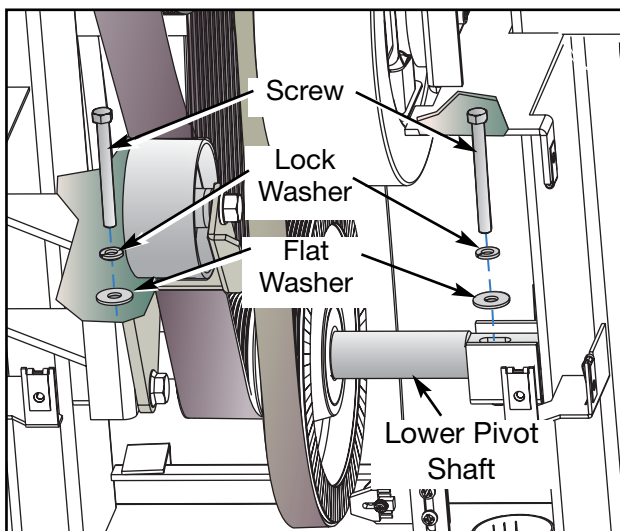


Figure 7

NOTE: If you are not replacing the primary belt skip to step 14.

! WARNING: Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

8. Remove the lower board assembly (if applicable).

A. Pull out on the lower board shield. See Figure 9.

NOTE: It will snap out.

B. Disconnect the elevation motor cable from the lower board. See Figure 10.

C. Using a 3/8" nutdriver, remove the nut, washer and ground wire from the stud above the lower board. See Figure 10.

D. Using a Phillips head screwdriver, remove the top two screws from the lower board assembly and loosen the bottom two screws. See Figure 11.

E. Slide the lower board assembly to the left and off the two screws, then gently let it suspend by the cables.

9. Remove the crank shaft assembly (if applicable).

A. Using a 9/16" socket wrench and a 9/16" open end wrench, remove the two bolts, four flat washers and two nuts from each of the top pillow blocks. See Figure 12.

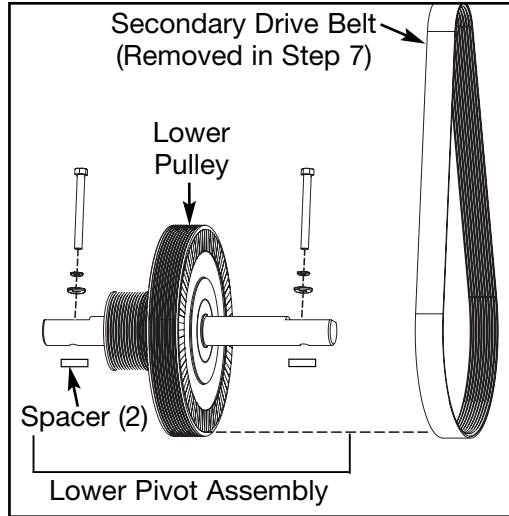


Figure 8

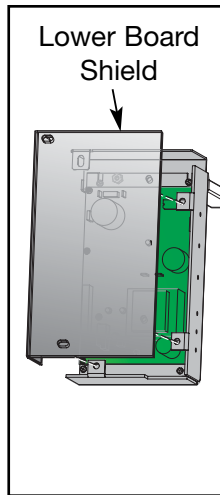


Figure 9

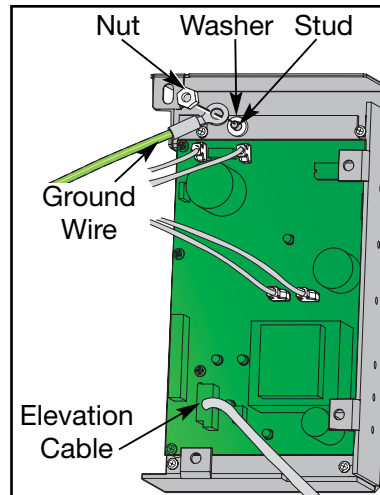


Figure 10

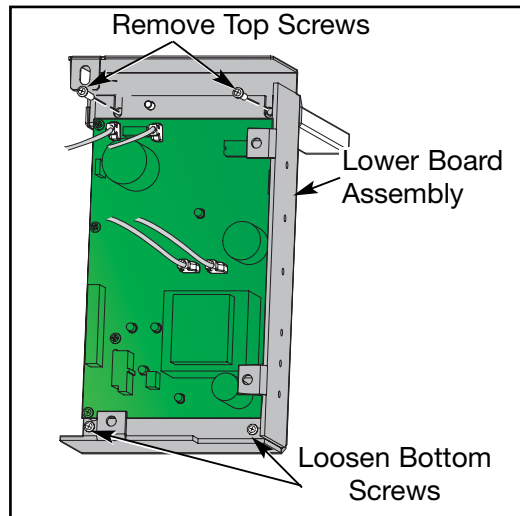


Figure 11

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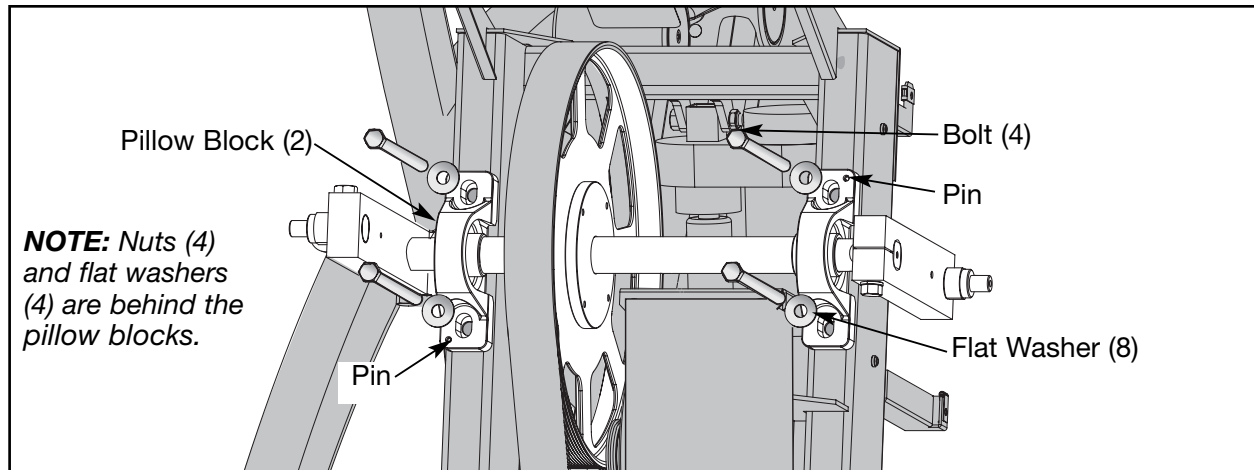


Figure 12

- B. Remove the crank shaft assembly along with the primary belt, pillow blocks and crank arms out of the unit. **NOTE:** You may need to wiggle the assembly out. There is a pin in each pillow block. Be sure not to lose them. See Figure 13.

10. Remove the primary belt (if applicable).

- A. Slide the primary drive belt off the upper pulley and discard it. See Figure 13.

11. Attach the primary belt (if applicable).

- A. Slide the new primary drive belt on the upper pulley. See Figure 13.
- B. Confirm that the primary drive belt is straight and centered on the upper pulley.

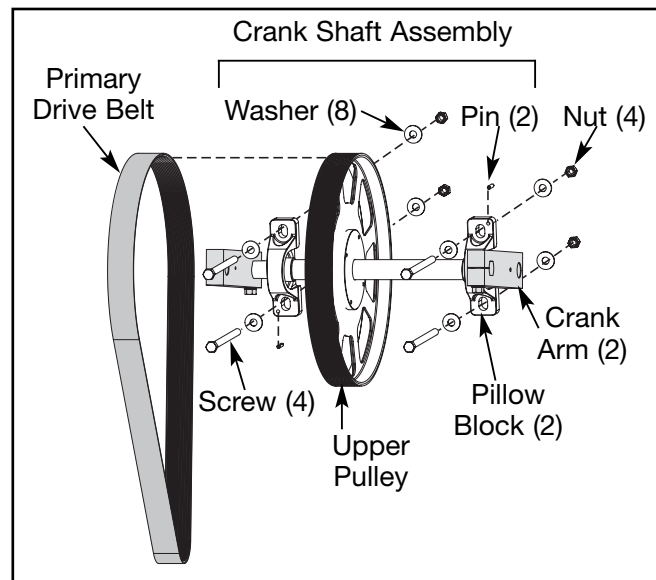


Figure 13

12. Attach the crank shaft assembly (if applicable).

- A. Confirm that a pin (removed in step 9B) protrudes about 1/4" out of the back of each pillow block. **NOTE:** The pins will slide into the frame in the next step. See Figures 12 and 13.
- B. Lift the assembly and slide the pins into the holes on the frame. **NOTE:** The pins should be flush with the front of the pillow blocks. You may need to tap them in.
- C. Using a 9/16" socket wrench and a 9/16" open end wrench, secure the two bolts, four flat washers and two nuts (removed in step 9A) to each pillow block. See Figure 12.

! CAUTION: Do not pinch your fingers between the belt and pulley during this procedure.

13. Attach the lower board assembly.

- A. Slide the lower board assembly over the two bottom screws and to the right.
- B. Using a Phillips head screwdriver, attach the top two screws and tighten the two bottom screws securing the lower board assembly in place.
- C. Place the washer on the stud then follow it with the ground wire terminal. Use a 3/8" nutdriver to secure the nut over the terminal. See Figure 10.
- D. Connect the elevation motor cable into the lower board.
- E. Place the shield into position and push in (the shield will snap in). See Figure 9.

14. Position the secondary drive belt.

- A. Slide the new secondary drive belt into place on the frame.

15. Secure the lower pivot assembly.

- A. Slide the lower pivot assembly through the both drive belts and into place on the frame.
- B. Confirm that the secondary drive belt is straight and centered on the lower pulley. See Figure 12.
- C. Confirm that the two spacers are still in place under the lower pivot shaft.
- D. Using a 7/16" socket wrench, tighten the two screws, two lock washers and two flat washers securing the lower pivot assembly in place.

16. Check the tension of the primary drive belt.

- A. Press on the primary belt with your hand. You should not feel any "give" in the primary belt. If the belt "gives", follow step 17 through 18. Otherwise, skip to step 19. **NOTE:** The secondary belt is self-tensioning.

17. Release the tension of the primary drive belt.

- A. Using a 1/2" socket wrench, loosen the bottom screw on the idler pulley. See Figure 14.
- B. Using a 1/2" socket wrench, loosen the top screw on the idler pulley. See Figure 14.

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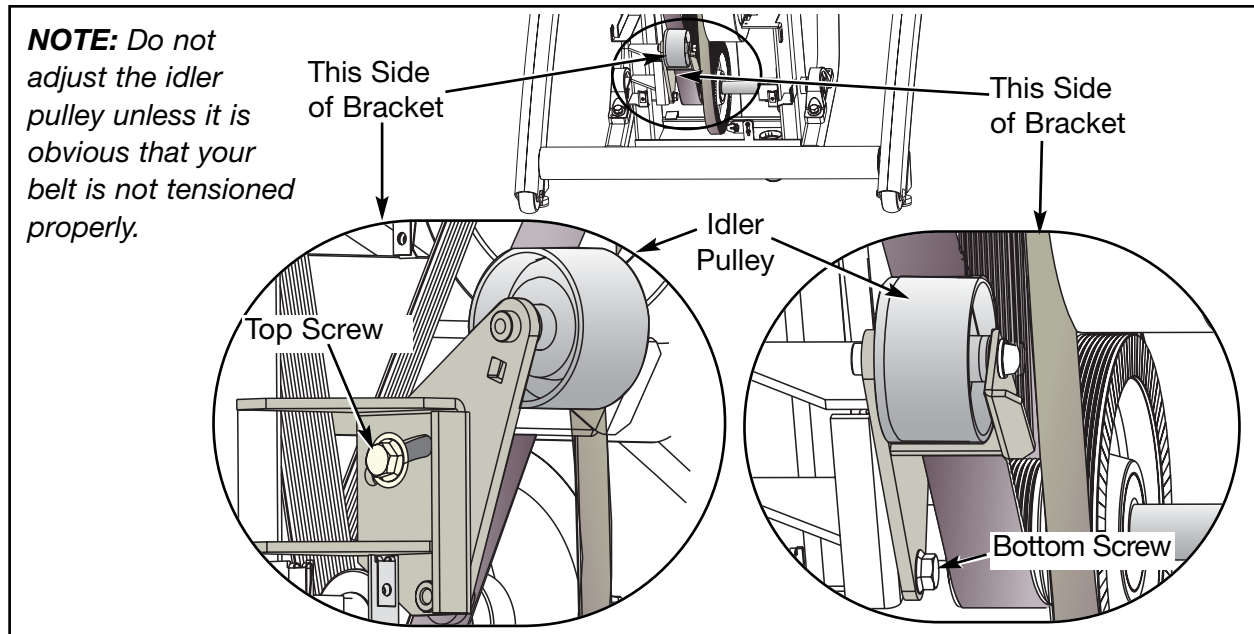


Figure 14

18. Torque the primary belt (if applicable).

- A.** Using a 3/8" square-hole torque wrench, pull up until the idler wheel rocks against the brake and is torqued to 75 ft-lbs. **NOTE:** Continue holding the torque wrench at 75 ft-lbs during the next step.
- B.** While holding the torque wrench at 75 ft-lbs, use a 1/2" socket wrench to tighten the top screw on the idler pulley. See Figure 14.
- C.** Using a 1/2" socket wrench, tighten the bottom screw on the idler pulley. See Figure 14.

19. Attach the crank covers.

- A.** Place each crank cover in position.
- B.** Using a Phillips head screwdriver, attach the three screws securing each crank cover in place. See Figure 6.

20. Attach the side covers.

- A.** Place each side cover in position in the rubber gasket.
- B.** Using a Phillips head screwdriver, tighten the six screws and six washers securing each side cover. See Figure 5.

21. Secure the connecting rods.

- A.** Using a 3/16" hex key, attach the screw securing each connecting rod to each crank. See Figure 4.

22. Attach the access cover.

- A.** While being sure not to pinch any cables, hold the access cover in place. See Figure 2.

- B. Using a Phillips head screwdriver, tighten the four screws securing the access cover. See Figure 2.

Eddy Current Brake

Tools Required

- Phillips head screwdriver
- 3/16" Hex key
- 7/16" Socket wrench
- Work gloves

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

1. **Elevate the unit and disconnect the power source.**
 - A. Plug the power cord into the power outlet.
 - B. Enter *Test Mode*.
 - C. Elevate the unit to a minimum of level 7 incline.
 - D. While the unit is elevated, turn the main power switch to the off (O) position and unplug the power cord from the power outlet.

 2. **Remove the access cover.**
 - A. Using a Phillips head screwdriver, remove the four screws securing the access cover. See Figure 2.
 - B. Remove the access cover.
- ! WARNING: Flywheel may be hot. Wait until it cools before servicing.***
3. **Detach the left connecting rod.**
 - A. Using a 3/16" hex key, remove the screw securing the left connecting rod to the crank. See Figure 4.
 - B. Place a cloth on the frame where the connecting rod will rest.
 - C. Rest the rod on the cloth to prevent scratches. See Figure 4.

 4. **Loosen the left side cover.**
 - A. Using a Phillips head screwdriver, remove the six screws and six washers securing each side cover in place. See Figure 5.
 - B. Remove both side covers. ***NOTE: The gasket will come off with one of the side covers. See Figure 5.***

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5. Remove the left crank cover.

- A. Using a Phillips head screwdriver, remove the three screws securing the left crank cover in place. See Figure 6.
- B. Remove the left crank cover.

! WARNING: Failure to release the drive belt tension may cause personal injury and may damage the unit.

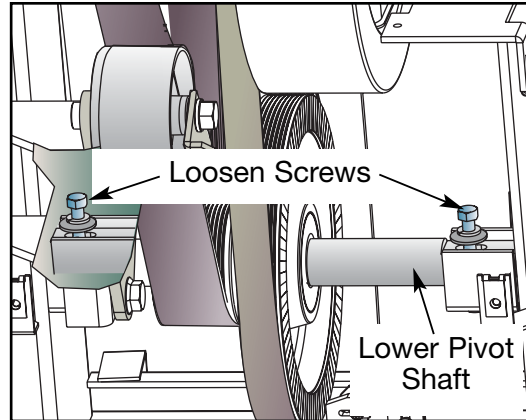


Figure 15

6. Release the drive belt tension.

- A. Using a 7/16" socket wrench, loosen the two screws on the lower pivot shaft until the screws are raised 1/2" (1.25 cm) above the shaft. See Figure 15. **NOTE:** The drive belt tension is now released.

! WARNING: Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

7. Disconnect the brake cables.

- A. Pull out on the lower board shield. See Figure 9. **NOTE:** It will snap out.
- B. Locate the two brake cables on the lower board that are labeled J1 and J2.
- C. Disconnect the two brake cables from the lower board.

! CAUTION: Pulley on eddy current brake is sharp. Wear work gloves to protect your hands.

8. Remove the eddy current brake.

- A. Wear work gloves whenever handling the eddy current brake. The pulley is sharp. See Figure 16.

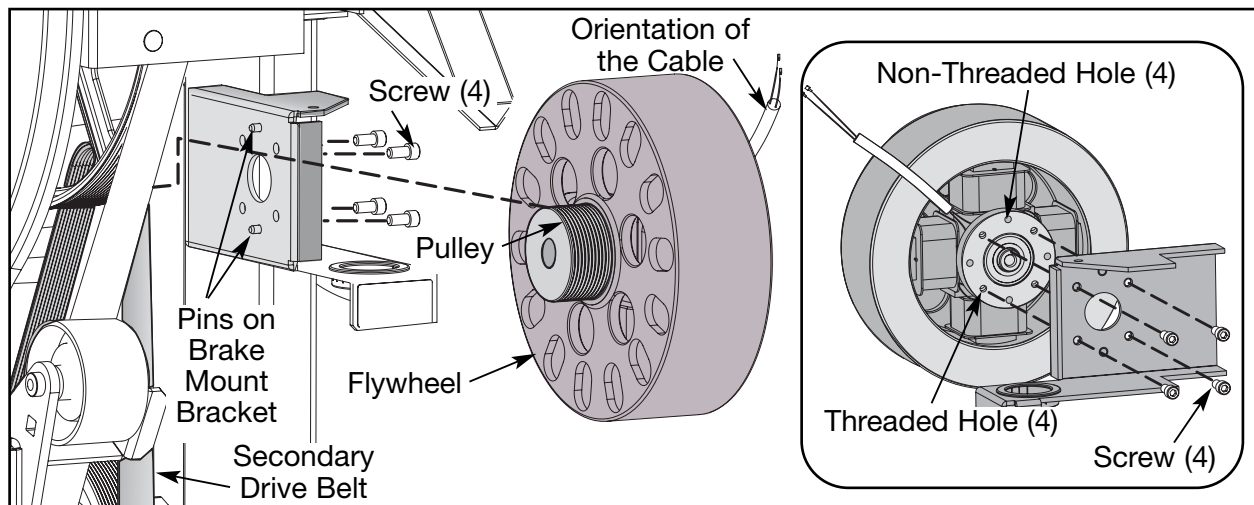


Figure 16

- B. When the flywheel is cool, remove the secondary belt from the eddy current brake.
 - C. Using a 3/16" hex key, first remove the two bottom screws securing the eddy current brake in place. See Figure 16.
 - D. Support the brake with your hand while removing the two top screws so that it does not fall.
 - E. Remove the eddy current brake from the unit. **NOTE:** *Cyber may want the old parts for evaluation. Call Cyber Customer Service to get an RMA number.*
- 9. Attach the new eddy current brake.**
- A. Locate the holes on the eddy current brake. Notice that there are four threaded holes and four non-threaded holes. See Figure 16.
 - B. Locate the two pins on the brake mount bracket. See Figure 16.
 - C. Orient the brake with the cable away from the unit. See Figure 16.
 - D. Slide the brake pulley into the secondary drive belt.
 - E. Place the two pins in any of the non-threaded holes on the bracket. **NOTE:** *Do not place the pins in threaded holes.*
 - F. Confirm that the brake is flat against the bracket and that the drive belt is straight on the pulley. **NOTE:** *Continue to support the brake during the next step.*
 - G. Using a 3/16" hex key, first tighten the two top screws securing the eddy current brake. See Figure 16.
 - H. Tighten the two bottom screws securing the eddy current brake.
- 10. Connect the brake cables.**
- A. Locate the J1 and J2 fast-ons on the lower board.
 - B. Connect the brake cables to the lower board at J1 and J2. **NOTE:** *It does not matter which brake cable connects to J1 and J2.*
 - C. Place the lower board shield in position and snap it in.
- 11. Tension the drive belt.**
- A. Confirm that the secondary drive belt is straight and centered on the lower pulley. See Figure 12.
 - B. Confirm that the two spacers are still in place under the lower pivot shaft.
 - C. Using a 7/16" socket wrench, tighten the two screws on the lower pivot shaft.

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! CAUTION: Do not pinch your fingers between the belt and pulley during this procedure.

D. Use your hand to slowly turn the flywheel and ensure that the belt is on straight.

12. Attach the left crank cover.

A. Place the crank cover in position.

B. Using a Phillips head screwdriver, attach the three screws removed in step 5A. See Figure 6.

13. Secure the left side cover.

A. Using a Phillips head screwdriver, attach the six screws and six washers removed in step 4A.

14. Attach the left connecting rod.

A. Place the left connecting rod in position.

B. Using a 3/16" hex key, attach the screw removed in step 3A. See Figure 4.

15. Attach the access cover.

A. While being sure not to pinch any cables, place the access cover in position.

B. Using a Phillips head screwdriver, attach the four screws removed in step 2A. See Figure 2.

16. Test the unit for proper operation.

A. Connect the power cord into the power outlet.

B. Turn the main power switch above the power inlet to the on (I) position.

C. Operate the unit to verify proper operation.

Elevation Motor

Tools Required

- Phillips head screwdriver
- 3/16" Hex key
- 7/16" Socket wrench
- 3/8" Nutdriver or socket wrench
- 9/16" Open end wrench
- 9/16" Socket wrench

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

1. **Elevate the unit and disconnect the power source.**
 - A. Plug the power cord into the power outlet.
 - B. Enter *Test Mode*.
 - C. Elevate the unit to a minimum of level 7 incline.
 - D. While the unit is elevated, turn the main power switch to the off (O) position and unplug the power cord from the power outlet.
2. **Remove the access cover.**
 - A. Using a Phillips head screwdriver, remove the four screws securing the access cover. See Figure 2.
 - B. Remove the access cover.

! WARNING: Flywheel may be hot. Wait until it cools before servicing.

3. **Detach the connecting rods.**
 - A. Using a 3/16" hex key, remove the screw securing each connecting rod to each crank. See Figure 4. **NOTE:** *Detach only the ends where the rods connect the to the crank.*
 - B. Place a cloth on the frame where each connecting rod will rest.
 - C. Rest each rod on a cloth to prevent scratches. See Figure 4.
4. **Remove the side covers.**
 - A. Using a Phillips head screwdriver, remove the six screws and six washers securing each side cover in place. See Figure 5.
 - B. Remove both side covers. **NOTE:** *The gasket will come off with one of the side covers. See Figure 5.*

5. **Remove the center cover.**
 - A. Using a Phillips head screwdriver, remove the two screws securing the center cover in place.
 - B. Remove the center cover.

! WARNING: Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

6. **Disconnect the elevation cable.**
 - A. Pull out on the lower board shield. **NOTE:** *It will snap out.*
 - B. Disconnect the elevation cable from the lower board and slide it out of its slot on the frame.

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7. Remove the elevation motor.

- A. Place your body next to the front end assembly to prevent it from pivoting and falling to the floor during the next step.
- B. Using a 9/16" open end wrench and a 9/16" socket wrench, remove the top bolt and nut securing the elevation motor in place. See Figure 17. **NOTE:** Do not lose the spacer between the bolt and nut.
- C. Pivot the front end assembly back and lean it against the frame (not the floor).
- D. Using a 9/16" open end wrench and a 9/16" socket wrench, remove the bottom bolt and nut securing the elevation motor in place. **NOTE:** Do not lose the spacer between the bolt and nut.

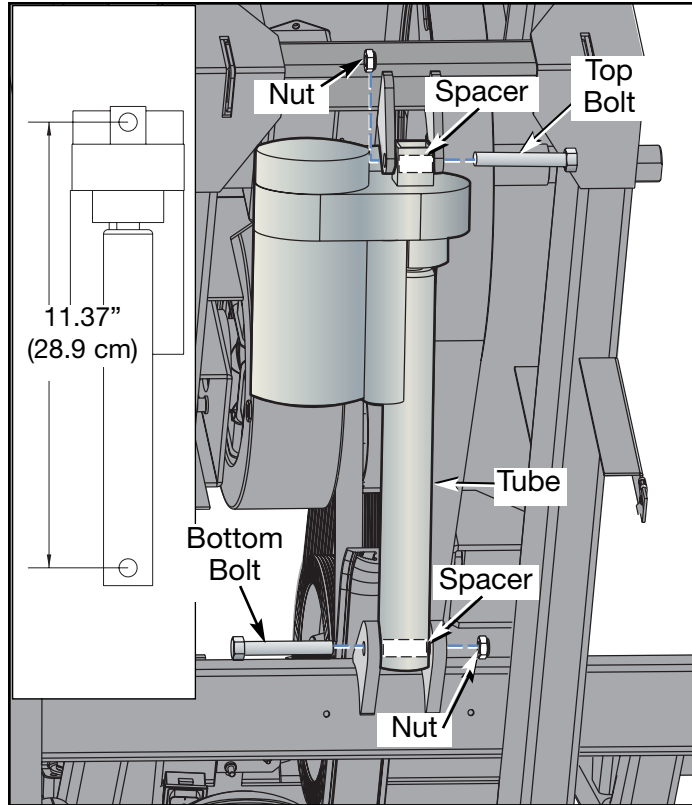


Figure 17

- E. Remove the elevation motor.
NOTE: Cybox may want the old parts for evaluation. Call Cybox Customer Service to get an RMA number.

8. Calibrate the elevation motor.

- A. Connect the elevation motor to the lower board and temporarily connect the power. **NOTE:** The switch should automatically adjust to the level 3 position (starting level) before adjusting the tube nut.
- B. Turn the tube with your fingers until it measures 11.37" (28.9 cm) from the center of the top hole to the center of the bottom hole. See Figure 17.
- C. Turn the main power switch above the power inlet to the off (O) position and disconnect the power cord.
- D. Disconnect the elevation motor cable from the lower board and set the motor aside until step 10A.

9. Attach the elevation motor.

- A. Confirm that the two spacers (from step 7B and 7D) are in place.
- B. Pivot the front end assembly back into the position it was before step 7C.
- C. Place the new elevation motor in position and slide both bolts into the slots before tightening. See Figure 17. **NOTE:** The top bolt goes from the left to the right, but the bottom bolt can go either way.

- D. Using a 9/16" open end wrench and a 9/16" socket wrench, tighten a nut on each bolt.

10. Connect the elevation cable.

- A. Connect the elevation cable to the lower board and place it in the slot mentioned in step 6B.
- B. Place the lower board shield in position and snap it in.

11. Secure the center cover.

- A. Place the center cover in position.
- B. Using a Phillips head screwdriver, attach the two screws removed in step 5A.

12. Secure the side covers.

- A. Place the two side covers and the gasket in position.
- B. Using a Phillips head screwdriver, attach each side cover with the six screws and six washers removed in step 4A. **NOTE:** You will have to elevate the unit to level 7 to attach the bottom two screws as discussed in step 1.

13. Attach the connecting rods.

- A. Place each connecting rod in position.
- B. Using a 3/16" hex key, attach each connecting rod with a screw removed in step 3A. See Figure 4.

14. Attach the access cover.

- A. While being sure not to pinch any cables, place the access cover in position.
- B. Using a Phillips head screwdriver, attach the four screws removed in step 2A. See Figure 2.

15. Test the unit for proper operation.

- A. Connect the power cord into the power outlet.
- B. Turn the main power switch above the power inlet to the on (I) position.
- C. Operate the unit at all levels to verify proper operation.

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Power Switch

Tools Required

- Phillips head screwdriver

! WARNING: *Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.*

1. Disconnect the external power source.

- Turn the main power switch above the power inlet to the off (O) position.
- Unplug the power cord from the power outlet and from the power inlet.

2. Remove the access cover.

- Using a Phillips head screwdriver, remove the four screws securing the access cover. See Figure 2.
- Remove the access cover.

3. Remove the power switch assembly.

- Using a Phillips head screwdriver, remove the two screws on each side of the power switch. See Figure 18.

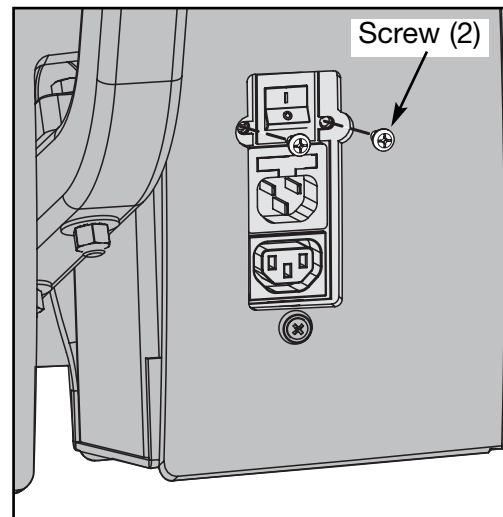


Figure 18

- Reach inside the unit and pull the power switch assembly up and out.
- Make note of which fast-ons are connected to the connectors.
- Disconnect the ten fast-ons from the power switch assembly.

4. Connect the cables.

- Connect the ten fast-ons to the new power switch assembly as shown in Figure 19.
NOTE: *Refer to the schematic at the back of this manual if necessary.*

5. Attach the power switch assembly.

- Slide the power switch assembly into its slots. See Figure 19.
- Using a Phillips head screwdriver, attach the two screws removed during step 3A into the power switch. See Figure 18.

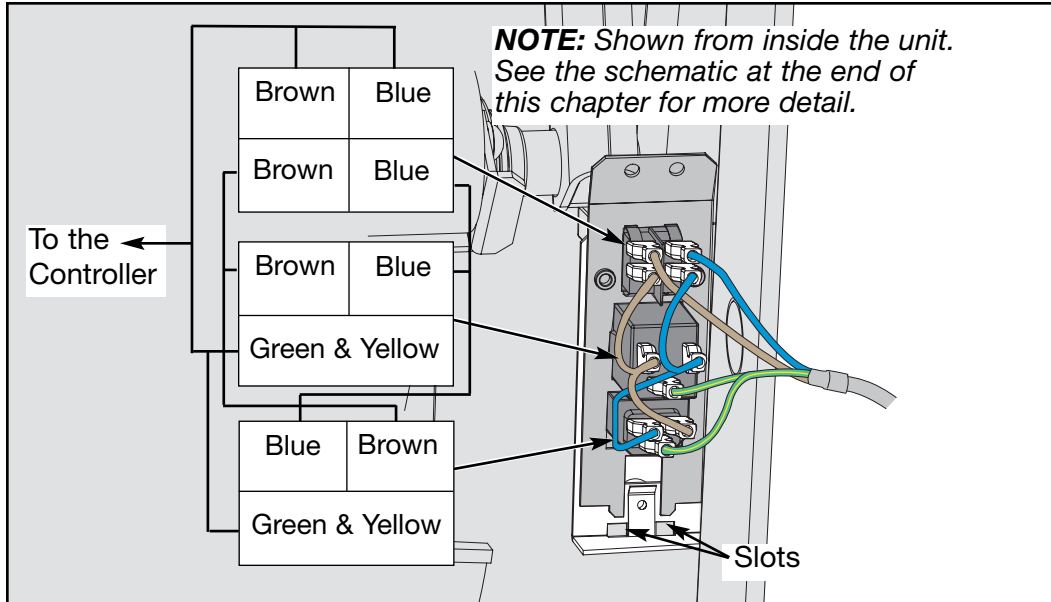


Figure 19

6. Attach the access cover.

- A.** While being sure not to pinch any cables, place the access cover in position.
- B.** Using a Phillips head screwdriver, attach the four screws removed in step 2A. See Figure 2.

7. Test the unit for proper operation.

- A.** Connect the power cord into the power inlet and the power outlet.
- B.** Turn the main power switch to the on (I) position.
- C.** Operate the unit at all levels to verify proper operation.

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Upper Pillow Blocks

Tools Required

- Phillips head screwdriver
- 3/16" Hex key
- 1/8" Hex key
- 7/16" Socket wrench
- 9/16" Socket wrench
- 9/16" Open end wrench
- 3/8" Nutdriver or socket wrench

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

1. Elevate the unit and disconnect the power source.

- A. Plug the power cord into the power outlet.
- B. Enter *Test Mode*.
- C. Elevate the unit to a minimum of level 7 incline.
- D. While the unit is elevated, turn the main power switch to the off (O) position and unplug the power cord from the power outlet.

2. Remove the access cover.

- A. Using a Phillips head screwdriver, remove the four screws securing the access cover. See Figure 2.
- B. Remove the access cover.

! WARNING: Flywheel may be hot. Wait until it cools before servicing.

3. Detach the connecting rods.

- A. Using a 3/16" hex key, remove the screw securing each connecting rod to each crank. See Figure 4.
- B. Place a cloth on the frame where each connecting rod will rest.
- C. Rest each rod on a cloth to prevent scratches. See Figure 4.

4. Remove the side covers.

- A. Using a Phillips head screwdriver, remove the six screws and six washers securing each side cover in place. See Figure 5.
- B. Remove both side covers. ***NOTE: The gasket will come off with one of the side covers.*** See Figure 5.

5. Remove the crank covers.

- A. Using a Phillips head screwdriver, remove the three screws securing each crank cover in place. See Figure 6.
- B. Remove both crank covers.

! WARNING: Failure to release the drive belt tension may cause personal injury and may damage the unit.

6. Release the drive belt tension.

- A. Using a 7/16" socket wrench, loosen the two screws on the lower pivot shaft until the screws are raised 1/2" above the shaft. See Figure 15.
- NOTE:** The drive belt tension is now released.

7. Remove the crank arm disk supports.

- A. Using a Phillips head screwdriver, remove the one screw securing each crank arm disk support in place. See Figure 20.

! WARNING: Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

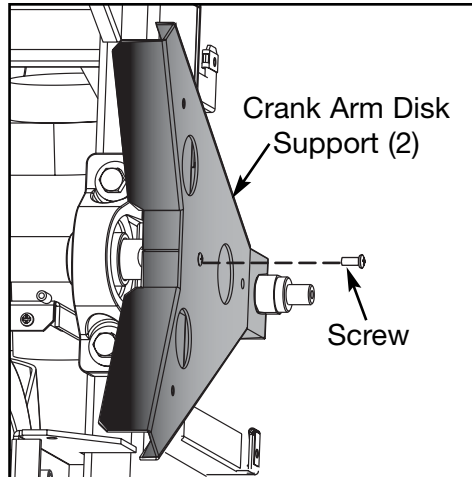


Figure 20

8. Remove the lower board assembly.

- A. Pull out on the lower board shield. **NOTE:** It will snap out.
- B. Disconnect the elevation cable from the lower board.
- C. Using a 3/8" nutdriver, remove the nut, washer and ground wire from the stud above the lower board.
- D. Using a Phillips head screwdriver, remove the top two screws from the lower board assembly and loosen the bottom two screws.
- E. Slide the lower board assembly left and off the two bottom screws then gently suspend it by the cables.

9. Remove the crank arms.

- A. Using a 7/16" socket wrench, loosen but do not remove the one screw on each crank arm. See Figure 21.
- B. Remove the crank arms.

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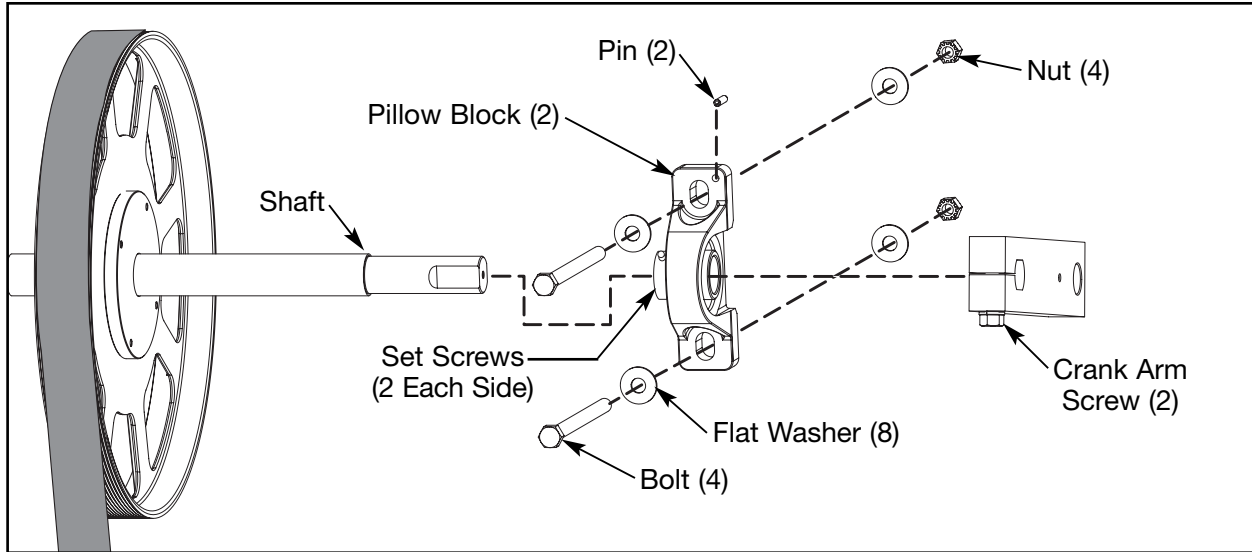


Figure 21

10. Remove the crank shaft assembly.

- A. Using a 9/16" socket wrench and a 9/16" open end wrench, remove the two bolts, four flat washers and two nuts from each of the top pillow blocks. See Figure 12.
- B. Remove the crank shaft assembly along with the primary belt and pillow blocks out of the unit. **NOTE:** *There is a pin in each pillow block.* See Figure 13.

11. Remove the top pillow blocks.

- A. Using a 1/8" hex key, loosen but do not remove the two set screws on the each pillow block. See Figure 21.
- B. Pull each pillow block off the shaft. See Figure 21.
- C. Discard the pillow blocks and pins (if applicable).

12. Attach the new top pillow blocks.

- A. Slide a pillow block on each end of the shaft. See Figure 21. **NOTE:** *Orientation of pillow block sleeve and set screws must go toward the inside. Do not tighten the set screws until step 13F.*

13. Attach the crank shaft assembly.

- A. Confirm that a pin protrudes about 1/4" out of the back of each pillow block and flush with the front. **NOTE:** *The pins will slide into the frame in the next step.*
- B. Place the assembly into the primary belt and slide the pins into the holes on the frame. **NOTE:** *The pins should still be flush with the front of the pillow blocks. You may need to tap them in.*
- C. Confirm that the belt is straight on the upper pulley.
- D. Using a 9/16" socket wrench and a 9/16" open end wrench, secure the two bolts, four flat washers and two nuts (removed in step 10A) to each pillow block. See Figure 12.

- E. Using a 1/8" hex key, tighten the two set screws on each pillow block.

! CAUTION: Do not pinch your fingers between the belt and pulley during this procedure.

14. Secure the crank arms.

- A. Slide each crank arm in place. **NOTE:** *The face of each crank arm should be flush with the end of each shaft.*
- B. Using a 7/16" socket wrench, tighten the one screw on each crank arm.

15. Attach the lower board assembly.

- A. Place the lower board assembly over the two bottom screws and slide it to the right.
- B. Using a Phillips head screwdriver, attach the top two screws removed in step 8D and tighten the bottom two screws.
- C. Connect the elevation cable to the lower board and slide it into its slot on the frame.
- D. Place the washer (first) and the ground terminal (next) onto the stud and tighten with the nut removed during step 8C.
- E. Place the lower board shield in position and snap it in.

16. Attach the crank arm disk supports.

- A. Using a Phillips head screwdriver, attach each crank arm disk support with one screw removed during step 7A. See Figure 20.

17. Tension the drive belt.

- A. Using a 7/16" socket wrench, tighten the two screws on the lower pivot shaft. See Figure 15.

18. Attach the crank covers.

- A. Place each crank cover in position.
- B. Using a Phillips head screwdriver, attach each crank cover with three screws removed in step 5A. See Figure 6.

19. Secure the side covers.

- A. Place the two side covers and gasket in position.
- B. Using a Phillips head screwdriver, attach each side cover with the six screws and six washers removed in step 4A.

20. Attach the connecting rods.

- A. Place each connecting rod in position.

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- B. Using a 3/16" hex key, attach each connecting rod with a screw removed in step 3A. See Figure 4.

21. Attach the access cover.

- A. While being sure not to pinch any cables, place the access cover in position.
- B. Using a Phillips head screwdriver, attach the four screws removed in step 2A. See Figure 2.

22. Test the unit for proper operation.

- A. Connect the power cord into the power outlet.
- B. Turn the main power switch above the power inlet to the on (I) position.
- C. Operate the unit at all levels to verify proper operation.

Lower Pillow Blocks

Tools Required

- Phillips head screwdriver
- 3/16" Hex key
- 1/8" Hex key
- 2.5" (6.3 cm) Wooden block
- 9/16" Socket wrench
- 9/16" Open end wrench

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

1. Elevate the unit and disconnect the power source.

- A. Plug the power cord into the power outlet.
- B. Enter *Test Mode*.
- C. Elevate the unit to a minimum of level 7 incline.
- D. While the unit is elevated, turn the main power switch to the off (O) position and unplug the power cord from the power outlet.

2. Remove the access cover.

- A. Using a Phillips head screwdriver, remove the four screws securing the access cover. See Figure 2.
- B. Remove the access cover.

! WARNING: Flywheel may be hot. Wait until it cools before servicing.

3. Detach the connecting rods.

- A. Using a 3/16" hex key, remove the screw securing each connecting rod to each crank. See Figure 4.
- B. Place a cloth on the frame where each connecting rod will rest.
- C. Rest each rod on a cloth to prevent scratches. See Figure 4.

4. Remove the side covers.

- A. Using a Phillips head screwdriver, remove the six screws and six washers securing each side cover in place. See Figure 5.
- B. Remove both side covers. **NOTE:** The gasket will come off with one of the side covers. See Figure 5.

5. Remove the lower pillow blocks.

- A. Place a wooden block under the inner frame. See Figure 22.
- B. Using a 9/16" socket wrench and a 9/16" open end wrench, remove the two bolts, four flat washers and two nuts from each of the bottom pillow blocks. See Figure 22.

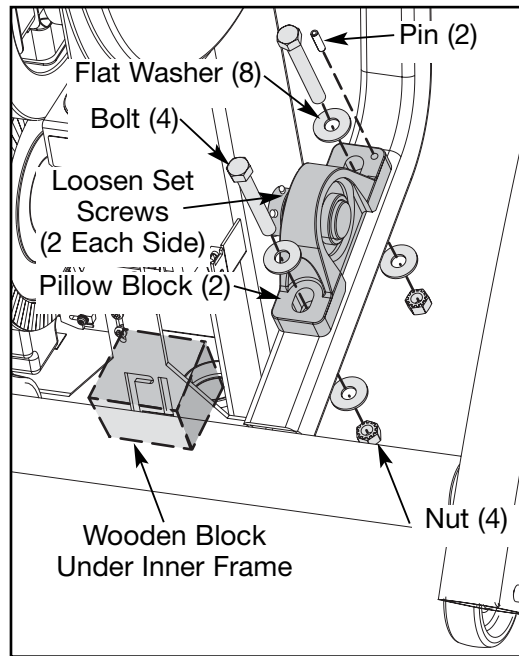


Figure 22

- C. Pull each pillow block and pin off the frame. See Figure 22. **NOTE:** You may need to tilt the pillow block up or pry it up off the frame. There is a pin in each pillow block.
- D. Discard the pillow blocks and pins (if applicable).

6. Attach the new lower pillow blocks.

- A. Confirm that a pin protrudes out of the back of each pillow block about 1/4" and flush with the front.
- B. Slide each pillow block on the shaft and each pin in its slot on the frame. **NOTE:** Orientation of pillow block sleeve and set screws must go toward the inside. When installed properly the pins should be flush with the front of the pillow blocks. You may need to tap them in.
- C. Using a 1/8" hex key, tighten the two set screws on each pillow block.
- D. Remove the wooden block from under the inner frame. See Figure 22.

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7. Secure the side covers.

- A. Place the two side covers and gasket in position.
- B. Using a Phillips head screwdriver, attach each side cover with the six screws and six washers removed in step 4A.

8. Attach the connecting rods.

- A. Place each connecting rod in position.
- B. Using a 3/16" hex key, attach each connecting rod with a screw removed in step 3A. See Figure 4.

9. Attach the access cover.

- A. While being sure not to pinch any cables, place the access cover in position.
- B. Using a Phillips head screwdriver, attach the four screws removed in step 2A.

Pedal Arm & Linkage Arm

NOTE: The pedal arms and linkage arms are removed in the same way. This procedure can be used for both.

Tools Required

- Phillips head screwdriver
- 3/16" Hex key

1. Disconnect the external power source.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Unplug the power cord from the power outlet.

2. Remove the arm.

- A. Using a Phillips head screwdriver or 3/16" hex key, remove each screw securing the (appropriate) cap. See Figure 23.
- B. Remove the cap.
- C. Slide the foot plate off the foot plate shafts (if applicable).
- D. Slide the (appropriate) arm off the shaft (or shafts).

3. Attach the new arm.

- A. Slide the (appropriate) arm on the shaft (or shafts).
- B. Slide the foot plate on the foot plate shafts (if applicable).
- C. Using a Phillips head screwdriver or 3/16" hex key, attach cap with the (appropriate) screw securing the cap. See Figure 23.

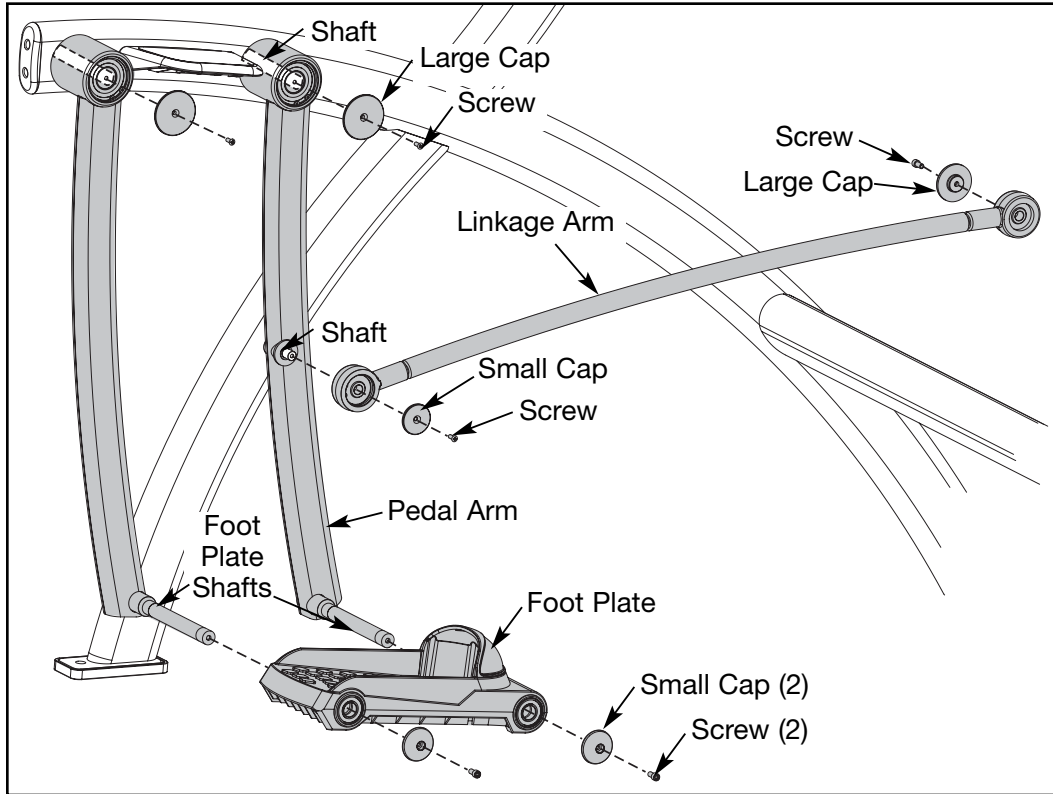


Figure 23

Lower Control Board

NOTE: The rest of this procedure will refer to the board as a lower control assembly because the board is permanently attached to the bracket.

Tools Required

- Phillips head screwdriver
- 3/8" Nutdriver or socket wrench
- ESD (Electro Static Discharge) grounding strap

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

1. Disconnect the external power source.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Unplug the power cord from the power outlet.

2. Remove the access cover.

- A. Using a Phillips head screwdriver, remove the four screws securing the access cover. See Figure 2.

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- B. Remove the access cover.

! WARNING: Flywheel may be hot. Wait until it cools before servicing.

3. Disconnect the cables from the lower board.

- A. Pull out on the lower board shield. **NOTE:** *It will snap out.*
- B. Disconnect the cables from the lower board. This includes the elevation motor cable, display cable (P1), AC line 1 (J3 black), AC line 2 (J7 white), eddy current brake cable (J1 and J2) and speed sensor cable (J4).
- C. Using a 3/8" nutdriver, remove the nut, washer and ground wire from the stud above the lower board. See Figure 15.

! WARNING: Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

4. Remove the lower board assembly.

- A. Using a Phillips head screwdriver, remove the top two screws from the lower board assembly and loosen the bottom two screws.
- B. Slide the lower board assembly left and off the two bottom screws. **NOTE:** *Cybox may want the old parts for evaluation. Call Cybox Customer Service to get an RMA number.*

5. Attach the lower board assembly.

- A. Place the lower board assembly over the two bottom screws and slide it to the right.
- B. Using a Phillips head screwdriver, attach the top two screws removed in step 4A and tighten the bottom two screws.

6. Connect the cables to the lower board.

- A. Connect the cables to the lower board. This includes the elevation motor cable, display cable (P1), AC line 1 (J3 black), AC line 2 (J7 white), eddy current brake cable (J1 and J2) and speed sensor cable (J4).
- B. Place the washer (first) and the ground terminal (next) onto the stud and tighten with the nut removed during step 3C.
- C. Place the lower board shield in position and snap it in.

7. Test the unit for proper operation.

- A. Connect the power cord into the power outlet.
- B. Turn the main power switch above the power inlet to the on (I) position.
- C. Operate the unit at all levels to verify proper operation.

Upper Display Board

Tools Required

- Phillips head screwdriver
- ESD (Electro Static Discharge) grounding strap

1. Disconnect the external power source.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Unplug the power cord from the power outlet.

NOTE: Wear an ESD strap for the rest of this procedure.

2. Remove the console back from the handrail.

NOTE: If you have a cable plugged into the RJ-45 port disconnect it.

- A. Using a Phillips head screwdriver, remove the five screws securing the top console back to the console front. See Figure 24.

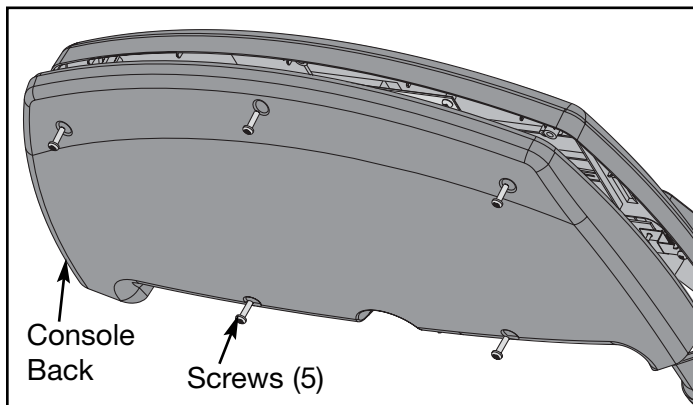


Figure 24

- B. Gently pull off the top console back.

3. Remove the display board.

- A. Disconnect these cables from the display board: the display cable (2 connectors); the two upper switch membrane connectors; the lower switch membrane connector; the contact heart rate cable and the upper to lower board jumper. See Figure 25.
- B. Using a Phillips head screwdriver, remove the four Phillips head screws securing the display board to the console.
- C. Gently pull the display board up to disconnect it from the CSAFE board.
NOTE: Cybox may want the old parts for evaluation. Call Cybox Customer Service to get an RMA number.

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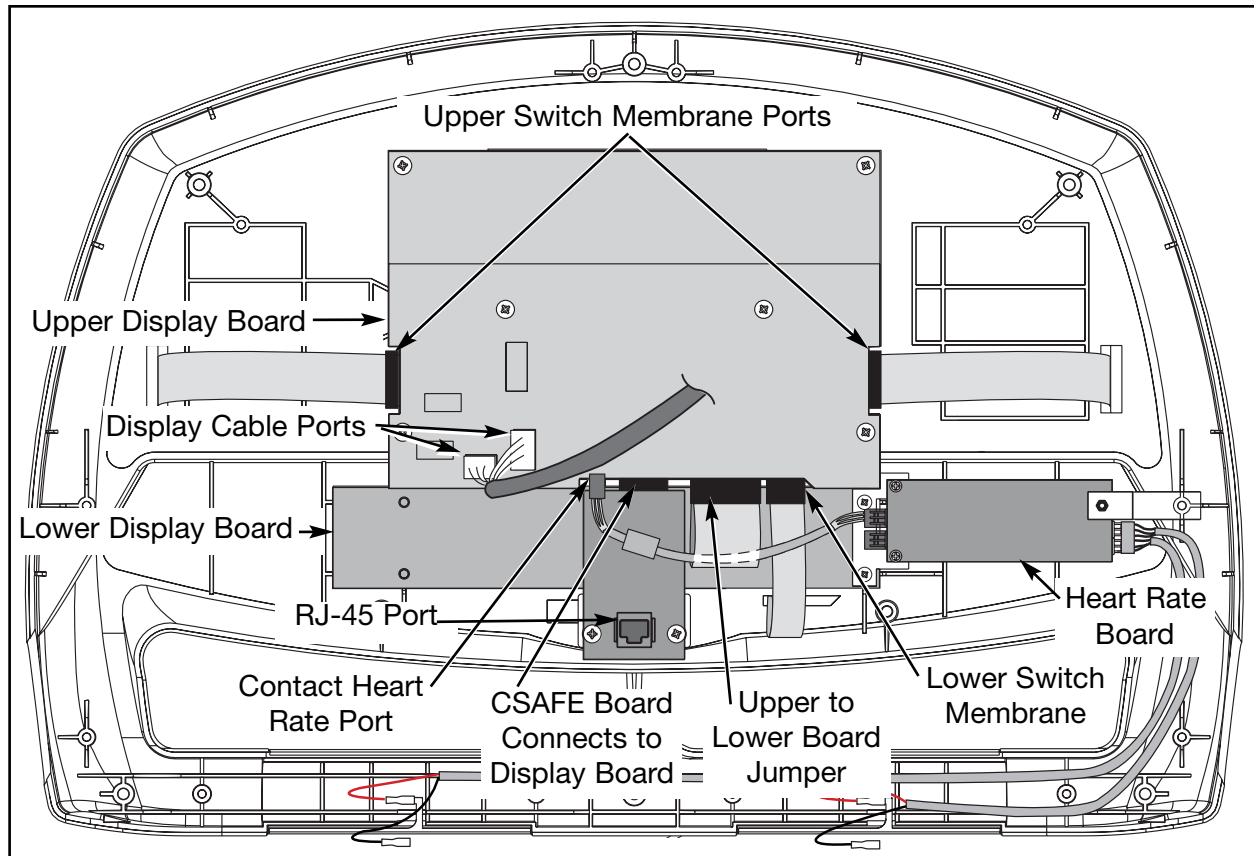


Figure 25 **NOTE:** This figure does not show handrails or lower console back.

4. Attach the new display board.

- A.** Place the display board in position and gently push the display board down into the CSafe board connector.
- B.** Using a Phillips head screwdriver, four screws securing the display board to the console.

5. Connect the cables.

- A.** Connect these cables into the display board: the display cable (2 connectors); the two upper switch membrane connectors; the lower switch membrane connector; the contact heart rate cable and the upper to lower board jumper. See Figure 25.

6. Check the connections.

- A.** Check to see that all of the cables are connected firmly in their proper place.

7. Secure the console back.

- A.** While being sure not to pinch any cables, use a Phillips head screwdriver to tighten five screws securing the top console back to the console front.

Contact Heart Rate Board

Tools Required

- Phillips head screwdriver
- ESD (Electro Static Discharge) grounding strap

1. Disconnect the external power source.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Unplug the power cord from the power outlet.

NOTE: Wear an ESD strap for the rest of this procedure.

2. Remove the console backs.

NOTE: If you have a cable plugged into the RJ-45 port disconnect it.

- A. Using a Phillips head screwdriver, remove the five screws securing the top console back to the console front. See Figure 24.
- B. Gently pull off the top console back.
- C. Using a Phillips head screwdriver, remove the three screws securing the lower back of the console in place and gently pull the back off. See Figure 26. **NOTE:**

Gently, suspend the lower back by the wires, being careful not to damage any of the wires.

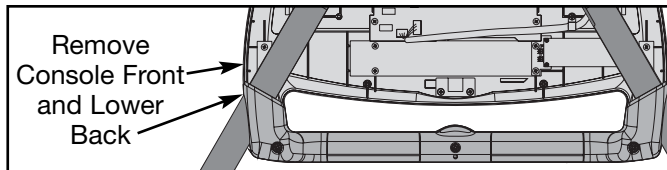


Figure 26

3. Disconnect the display cable.

- A. Disconnect the display cable from the display board (2 connectors).
- B. Using a Phillips head screwdriver, loosen the screw on the wire clip and remove the display cable from it. See Figure 27.

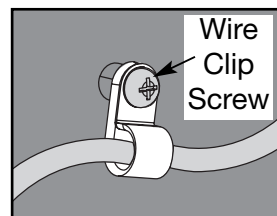


Figure 27

4. Remove the console front.

NOTE: If you have a cable plugged into the RJ-45 port disconnect it.

- A. Using a Phillips head screwdriver, remove the nine black screws securing the console front to the handrail. **NOTE:** Do not lose the screw and starwasher shown in Figure 28.

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B. Lift the console front off the unit and place it on a clean, flat surface.

5. Remove the heart rate board and bracket.

A. Using a Phillips head screwdriver, remove the two screws securing the heart rate board in place.

B. Disconnect the three cables from the contact heart rate board.

C. Turn the heart rate board over and use a Phillips head screwdriver to remove the screw from the old heart rate bracket.

NOTE: Keep all parts except the heart rate board (if applicable).

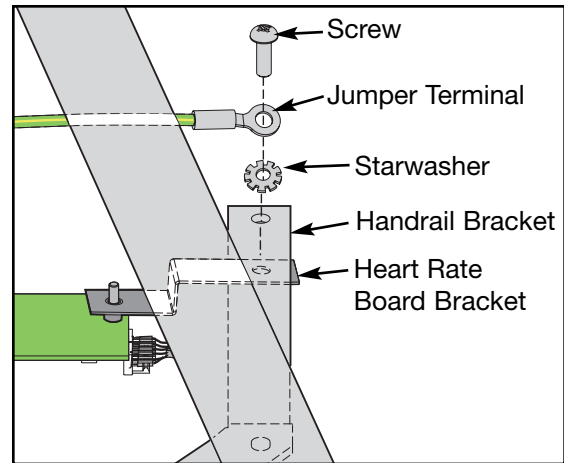


Figure 28

6. Attach the contact heart rate board and bracket.

A. Place the screw removed during step 5C into the heart rate board from the bottom. See Figure 29.

B. Place the short end of the new heart rate bracket over the screw on the heart rate board with the standoff touching the board. See Figure 29.

C. Using a Phillips head screwdriver, attach the heart rate board to the console with the two screws removed in step 5A.

D. Be sure the cable is still firmly connected in the right side of the heart rate board.

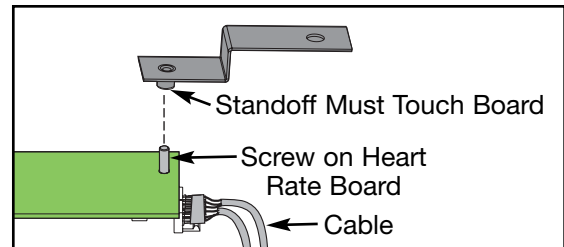


Figure 29

7. Attach the jumper and console front.

A. Place the starwasher next to the handrail bracket metal and hold the jumper terminal on top. See Figure 28.

B. Place the Phillips head screw removed in step 4A through the terminal, starwasher, handrail bracket and heart rate bracket and secure it tightly using a screwdriver. See Figure 28.

C. Using a Phillips head screwdriver, secure the console front to the handrail with the other eight black screws removed during step 4A.

8. Connect the display cable.

A. Connect the display cable into the display board (2 connectors).

B. Using a Phillips head screwdriver, place the display cable in the wire clip and tighten the screw. See Figure 27.

9. Secure the console backs.

- A.** While being sure not to pinch any cables, use a Phillips head screwdriver to secure the lower console back to the handrail with three screws removed during step 2C.
- B.** While being sure not to pinch any cables, use a Phillips head screwdriver to secure the the top console back to the console front with five screws removed during step 2A. See Figure 24.

CSAFE Board

Tools Required

- Phillips head screwdriver

1. Disconnect the external power source.

- A.** Turn the main power switch above the power inlet to the off (O) position.
- B.** Unplug the power cord from the power outlet.

2. Remove the top console back.

NOTE: If you have a cable plugged into the RJ-45 port disconnect it.

- A.** Using a Phillips head screwdriver, remove the five screws securing the top console back to the console front.
- B.** Gently pull off the top console back.

3. Remove the CSAFE board.

- A.** Using a Phillips head screwdriver, remove the two Phillips head screws holding the CSAFE board and ground jumper in place.
- B.** Gently pull the CSAFE board down to disconnect it from the display board. See Figure 25.

4. Attach the CSAFE board.

- A.** Place the CSAFE board in position and push up to connect it to the display board.
- B.** Place the ground jumper terminal over one of the screw holes on the CSAFE board (and secure it in the next step).
- C.** Using a Phillips head screwdriver, secure the two screws on the CSAFE board.

5. Secure the console back.

- A.** While being sure not to pinch any cables, attach the top console back to the console front with the five Phillips head screws.

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Upper Display Cable

NOTE: Display cables have a revision number label so that you can verify part number and latest revision of the cable. The upper display cable part number is AW-17007.

Tools Required

- 3/16" Hex key
- Phillips head screwdriver
- ESD (Electro Static Discharge) grounding strap
- Wire cutters

1. Disconnect the external power source.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Unplug the power cord from the power outlet.

NOTE: Wear an ESD strap for the rest of this procedure.

2. Remove the top console back.

NOTE: If you have a cable plugged into the RJ-45 port disconnect it.

- A. Using a Phillips head screwdriver, remove the five screws securing the top console back to the console front.
- B. Gently pull off the top console back. See Figure 24.

3. Remove the console.

- A. Have a second person support the console until step 7A.
- B. Using a hex key, remove the four screws and four lock washers securing the handrail in place.

4. Remove the upper display cable.

- A. Using a Phillips head screwdriver, loosen the wire retaining screw securing the display cable in place near the display board. See Figure 30.
- B. Disconnect the display cable (P3 and P8) from the upper display board. See Figure 27.
- C. Disconnect the upper display cable from the lower display cable. See Figure 27.
- D. Using wire cutters, cut the upper display cable in two and pull both ends out of the unit. **NOTE:** Pull the upper end up and out and the lower end down and out.

5. Attach the new upper display cable.

- A. Locate the end of the upper display cable with the single connector. See Figure 31.

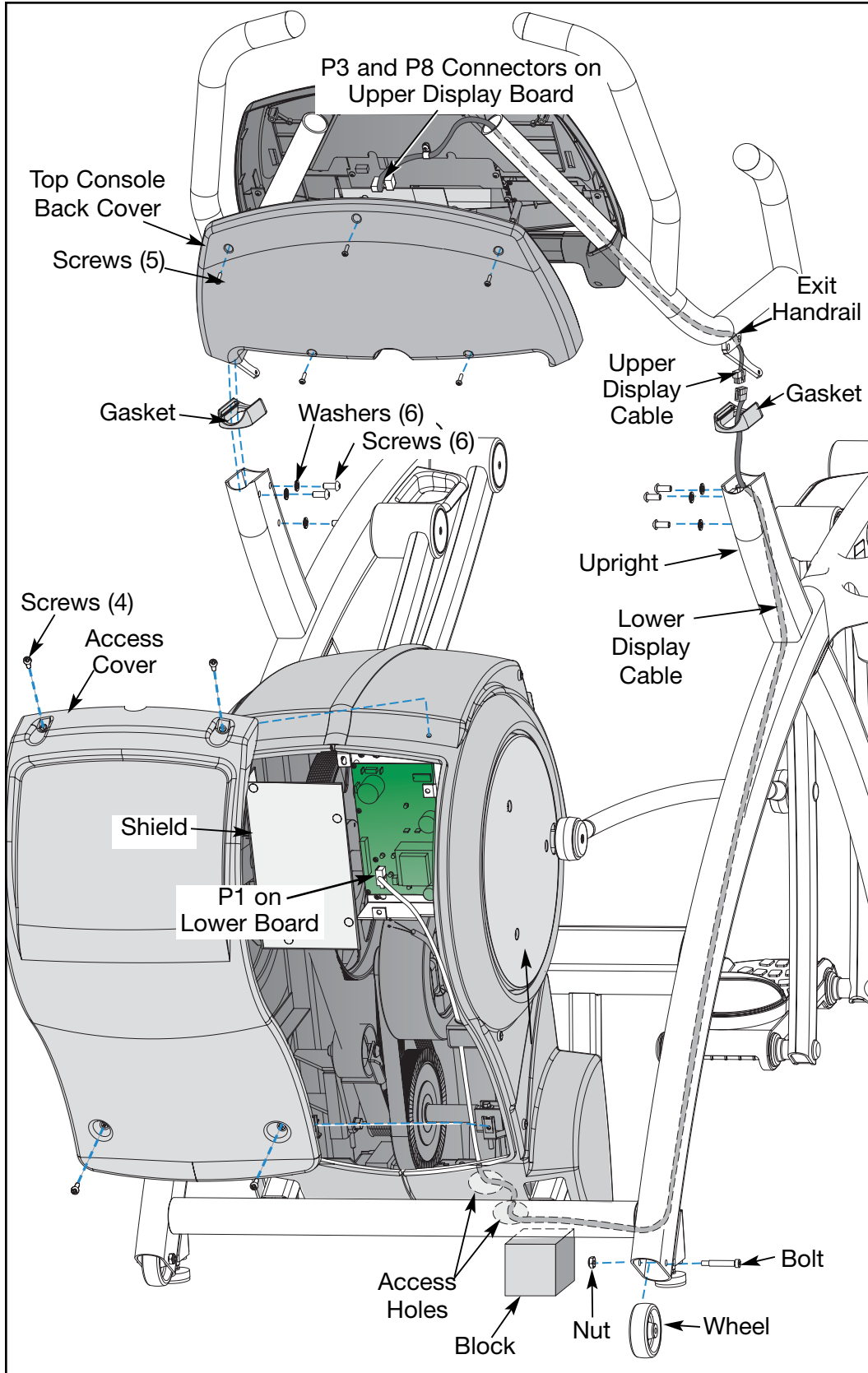


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B. Push the single connector down into the top handrail hole. See Figure 31.

C. Push the display cable down through the handrail and out the handrail's bottom hole.
NOTE: *Twisting the cable as you push will help it go through.*

D. Connect the upper display cable to the lower display cable.

NOTE: *If you are changing the lower display cable disregard this step.*

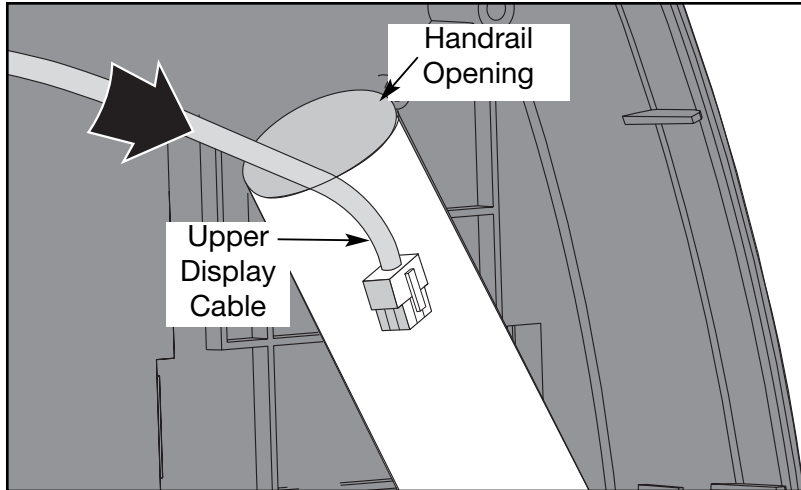


Figure 31

6. Secure the cable.

A. Using a Phillips head screwdriver, open the clip described in step 4A and secure the cable in the clip. See Figure 26.

B. Check to see that all of the connectors are connected firmly in their proper place.

7. Attach the console.

A. Place the console handrails on top of the gaskets. See Figure 26.

B. Using a hex key, attach the four screws and four lock washers securing the handrail in place.

8. Secure the console back.

A. While being sure not to pinch any cables, attach the top console back to the console front with the five Phillips head screws.

Lower Display Cable

NOTE: *Display cables have a revision number label so that you can verify the part number and latest revision of the cable. The lower display cable part number is AW-17008.*

Tools Required

- Phillips head screwdriver
- 9/16" Open-end wrench or socket wrench
- Tape
- 3/16" Hex key

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

1. **Disconnect the external power source.**
 - A. Turn the main power switch above the power inlet to the off (O) position.
 - B. Unplug the power cord from the power outlet.
2. **Remove the access cover.**
 - A. Using a Phillips head screwdriver, loosen the four screws securing the access cover. See Figure 2.
 - B. Remove the access cover.
3. **Remove the console.**
 - A. Have a second person support the console until step 9.
 - B. Using a hex key, remove the four screws and four lock washers securing the handrail in place.
4. **Remove the left wheel.**
 - A. Place a wooden block under the unit to take the weight off the left wheel.
 - B. Using a 9/16" wrench and a 3/16" hex key, remove the bolt and nut securing the left wheel in place. See Figure 30.
5. **Detach the lower display cable.**

! WARNING: Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

- A. Pull out on the lower board shield. **NOTE: It will snap out.**
 - B. Disconnect the display cable from the lower board. See Figure 30.
 - C. Remove the lower display cable from the wire holder bracket. See Figure 32.
6. **Attach the new lower display cable.**
 - A. Locate the new cable's 10 pin connector end of the lower display cable.

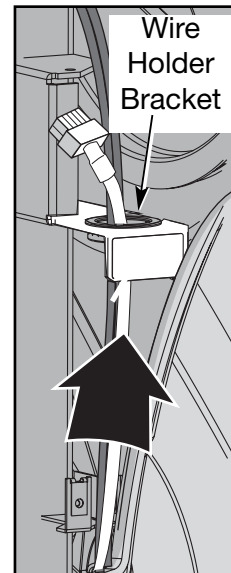


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- B. Tape the new 10 pin connector to the old lower display cable. **NOTE:** Be sure to tape the correct ends together. See Figure 33.
- C. Gently pull both cables through the unit. **NOTE:** Stop pulling before the new cable goes down into the upright.
- D. Remove the tape and discard the old cable.
- E. Confirm that the cable is routed through the access holes (see Figure 30) and through the wire holder bracket (see Figure 32).
- F. Connect the display cable to the lower control board.

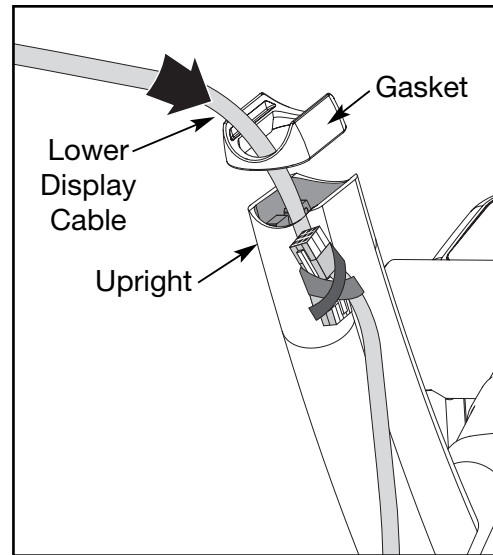


Figure 33

7. Attach the console.

- A. Place the console handrails on top of the gaskets. See Figure 26.
- B. Using a hex key, attach the four screws and four lock washers securing the handrail in place.

8. Secure the cable.

- A. Check to see that all of the connectors are connected firmly in their proper place.
- B. Place the lower board shield in position and snap it in.

9. Attach the access cover.

- A. While being sure not to pinch any cables, place the access cover in position.
- B. Using a Phillips head screwdriver, attach the four screws removed in step 2A.

10. Attach the left wheel.

- A. Using a 9/16" wrench and a 3/16" hex key, attach the bolt and nut securing the left transport wheel in position. See Figure 30.
- B. Remove the wooden block from under the unit.

11. Test the unit for proper operation.

- A. Connect the power cord into the power outlet.
- B. Turn the main power switch above the power inlet to the on (I) position.
- C. Operate the unit at all levels to verify proper operation.

Display Overlays

NOTE: This procedure will cover the upper and/or lower display overlay. They are removed and replaced the same.

Tools Required

- Phillips head screwdriver
- ESD (Electro Static Discharge) grounding strap
- Razor blade

1. Disconnect the external power source.

- A.** Turn the main power switch above the power inlet to the off (O) position.
- B.** Unplug the power cord from the power outlet.

2. Remove the top console back.

- A.** Using a Phillips head screwdriver, remove the five screws securing the top console back to the console front.
- B.** Gently pull off the top console back.

NOTE: Wear an ESD strap for the rest of this procedure.

3. Remove the display overlay.

- A.** While wearing an ESD strap, disconnect the lower switch membrane connector from the display board. See Figure 25.
- B.** Use a razor blade to peel up a corner of the display overlay and pull off the overlay.

4. Attach the display overlay.

- A.** Remove the paper backing from the new display overlay.
- B.** Slide the ribbon cable through the slot.
- C.** Carefully place the display overlay in place within the indentation on the console front.
- D.** Firmly rub the display overlay so that it adheres to the console.

5. Attach the console back.

- A.** While being sure not to pinch any cables, secure the console back to the console with the five Phillips head screws.

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- 6. Test the new display overlay.**
 - A.** Turn the main power switch to the on (I) position.
 - B.** Plug the unit into the power outlet.
 - C.** Try each key to be sure that it functions properly.

Parts List

NOTE: Parts lists and exploded views are on the pages that follow.

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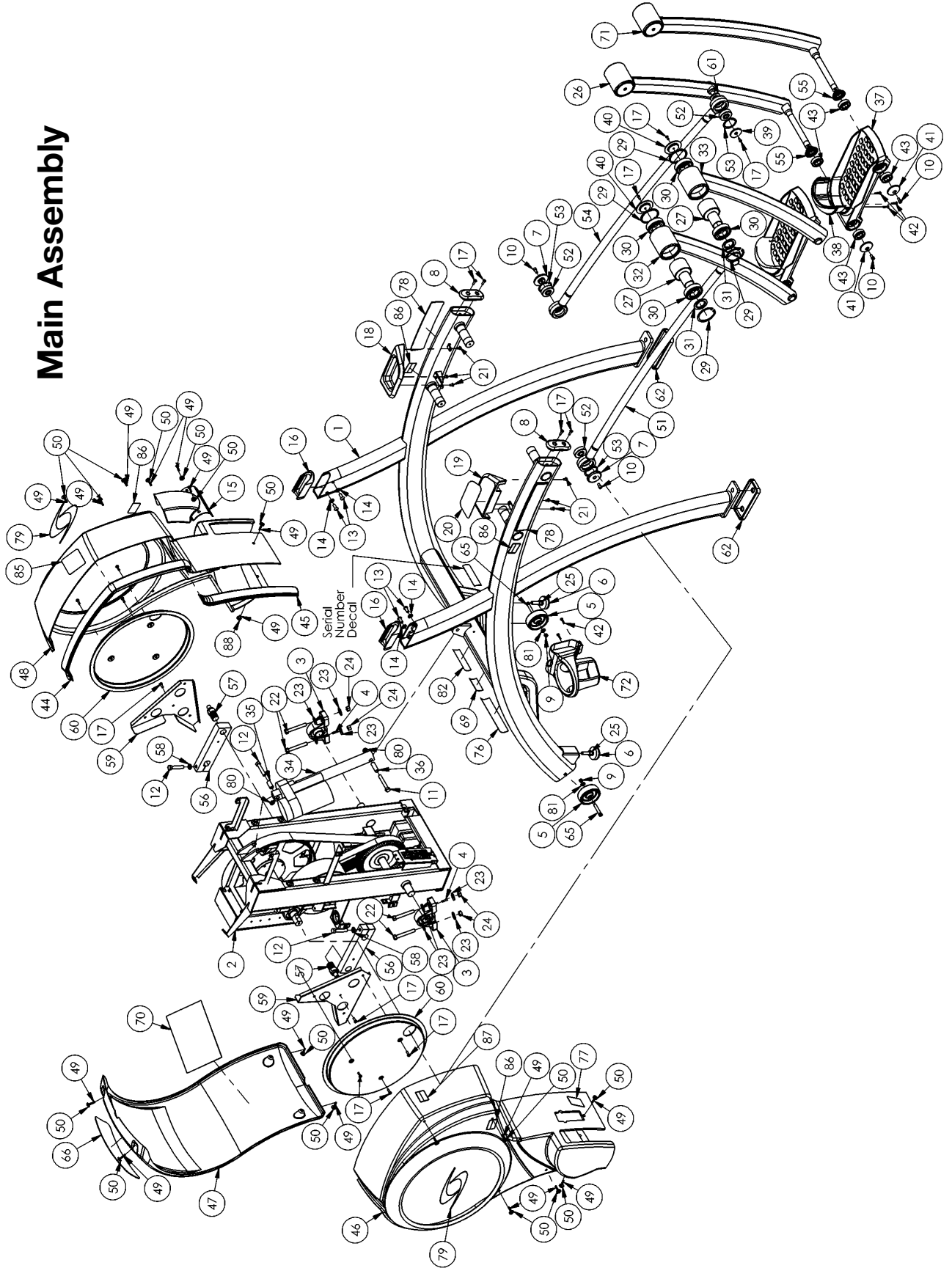
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Cybox Arc Trainer Owner's & Service Manual

Main Assembly

ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	AF-16471	Frame	46	1	PL-17047	Left Cover
2	1	AX-17156	Front End Assembly	47	1	PL-17048	Front Access Cover
3	2	AF-16694	Pillow Block	48	1	PL-17046	Right Cover
4	2	HX-17023	Spring Pin .188 x .75	49	17	HT512517	Tap Screw 10-24 x 1.00 Type WB PN HD
5	2	CW-17231	Plastic Wheel 3.0 Dia.	50	18	HS100000	Nylon Washer
6	2	HG700022	Leveling Glide	51	1	AF-16999	Left Linkage Rod
7	2	PL-16535	Linkage Rod Cap 2.00 OD	52	4	FB030244	Bearing
8	2	HX-16751	Tube End Cap	53	4	HX-17143	Retaining Ring
9	2	HN624901	Nylock Nut	54	1	AF-16655	Right Linkage Rod
10	6	HS-17147	SHCS 1/4-20 x .50	55	4	PL-17279	Foot Plate Shaft Spacer
11	1	HC701230	HHCS .375-16 x 2.50	56	2	FM-17037	Crank Arm
12	3	HC701226	HHCS .375-16 x 2.00	57	2	FM-17039	Crank Pin
13	4	HC660417	BHSCS .312-18 x 1.00	58	2	HS348300	Split Lockwasher .375
14	4	HS327300	Lockwasher External Tooth	59	2	AF-17020	Crank Cover Mounting Bracket
15	1	PL-17029	Elevation Motor Cover	60	2	PL-17027	Crank Cover
16	2	HX-17053	Handrail Trim Gasket	61	2	PL-17281	Connecting Rod Shaft Spacer
17	18	HS-17084	Screw 10-32 x .50 C-Sunk Oval	62	2	11090-392	Foot Cover
18	1	PL-17205	Right Accessory Tray	63	1	AW-17008	Lower Display Cable (not shown)
19	1	PL-17206	Left Warning Label Tray	64	1	AW-14007	Power Cord (not shown)
20	1	DE-17213-4	Warning Decal	65	2	JD623324	Shoulder Bolt 5-16 Dia. x 1-4 Th'd
21	6	HJ582510	SEMS 10-32 x .38	66	1	DE-17317	Decal Logo Arc Trainer
22	4	HC701232	HHCS .375-16 x 2.75	67	1	600AK003	Arc Trainer Filter Power Input Module/ Switch Plate Kit (not shown)
23	8	HS347700	Washer .375	68	1		Serial Number
24	4	HN706300	Nut K Lock .375-16	69	1	DE-17315	Decal ETL, CSA
25	2	HN704000	Hex Nut .375-16	70	1	DE-17322-4	Schedule and Error Code Label
26	1	AF-16647	Front Right Foot Plate Arm	71	1	AF-16677	Right Rear Foot Plate Arm
27	4	FM-16646	Outer Pivot Arm Bearing Spacer	72	1	PL-17209	Water Bottle Holder
28	4	FM-16645	Inner Pivot Arm Bearing Spacer	73	1	LT-17070-4	Arc Trainer Owner's and Service Manual (not shown)
29	8	BR030219	Retaining Ring Roller	74	1	600A-301	Arc Trainer Warranty Sheet (not shown)
30	8	HB-17280	Bearing	75	1	LT-17071	Arc Trainer Poster (not shown)
31	4	PL-17282	Arm Pivot Shaft Spacer	76	1	CM000240	Decal Disconnect Power
32	1	AF-16644	Left Front Foot Plate Arm	77	1	DE-17266	Decal UL Domestic
33	1	AF-16651	Left Rear Foot Plate Arm	78	2	DE-17318	Decal Logo Arc Trainer with Cybox
34	1	MR-16518	115VAC Motor Elevation	79	2	DE-17339	Decal Cybox Vortex
35	1	FT-17242	Top Elevation Mounting Sleeve	80	2	HN-60064	Jam Nut
36	1	FT-17243	Bottom Elevation Mounting Sleeve	81	2	HS328300	Split Lockwasher .312
37	2	PL-16878	Foot Plate	82	1	CM000241	Decal UL
38	2	PL-17030	Toe Cap	83	2	EW000028	Cable Tie (not shown)
39	2	PL-17188	Linkage Rod Cap 1.63 OD	84	1	SC-600A	Schematic (not shown)
40	4	PL-16450	Top Foot Plate Arm Cap	85	1	DE-17218-4	Label Heart Rate Zone
41	4	PL-17056	Foot Plate Shaft Cap	86	4	DE-17219-4	Caution Decal
42	8	HT552515	Tap Screw No. 8-16 x .75 Type WB PN	87	1	DE-17220-4	Warning Decal
43	8	HB-17036	Ball Bearing 6203A .75 Dia.	88	1	HT572512	Tap Screw 10-24 x .50 Type WB PN HD
44	1	HX-17270	H-Shaped Rubber Gasket 14.50 L				
45	1	HX-17271	H-Shaped Rubber Gasket 29.50 L				

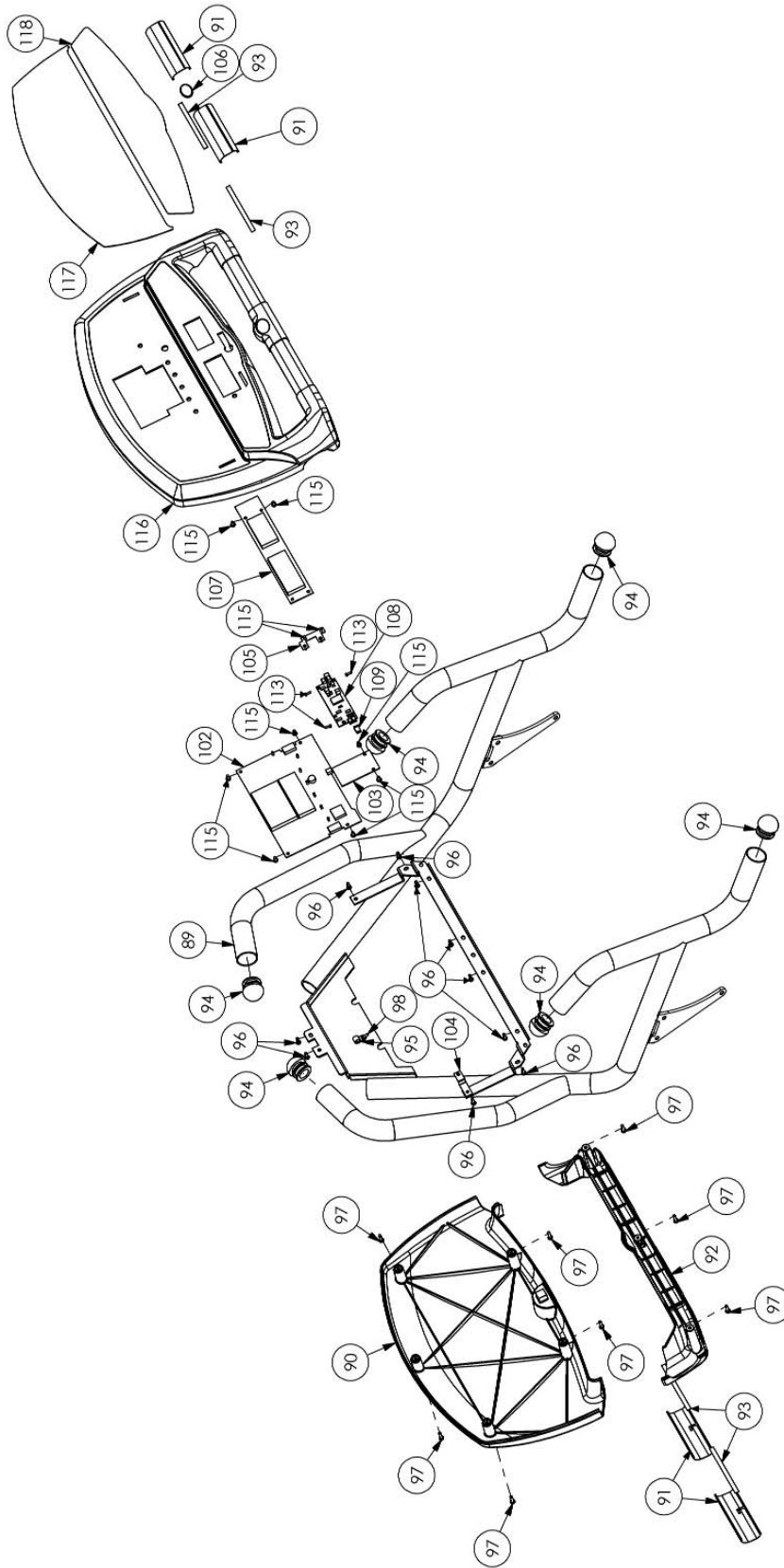
Main Assembly



Handrail Assembly

ITEM	QTY	PART NO.	DESCRIPTION
89	1	AF-16663	Handrail
90	1	PP620001	Back Plastic Console
91	4	BB030024	Grip
92	1	PP620002	Rear Console
93	1	YD000025	Tape
94	6	HX-17017	Tube End Plub 1.50 Tube OD
95	1	PN140000	Cable Clamp 5-16 Dia.
96	10	HT552512	Screw, 8-16 x .50 Type WB PNHD PHI
97	8	HJ542514	SEMS, 8-32 UNC x .62 PNHD Phil PI
98	1	HJ542510	SEMS, 8-32 x .38 PNHD Phil Ext
99	1	AW-17007	Cable Display Upper Arc Trainer (not shown)
100	2	CM000238	Anti Static Printed Label (not shown)
101	1	AX-17154-4	600A Front Console Assembly
102	1	AD-17095	Arc Display Board PCA
103	1	AD-17106	CSAFE Port Board With TVS PCA
104	1	BB030021	Salutron Bracket Ground
105	1	BB030022	Salutron Bracket
106	1	CM000239	Handset Logo Decal
107	1	EE000001	Handset Display With WHR PCA
108	1	EE000002	Heart Rate Monitor Assembly PCB
109	1	EL000000	Molex Connector 22-01-3037
110	1	EW600001	3 Pin Cable HR Jumper W-FER (not shown)
111	1	EW600002	CHE Cable Grip Assembly (not shown)
112	1	EW600004	CSAFE Jumper Ground (not shown)
113	3	HM522510	PN HD Phil SC No 4-40 x .38
114	1	HS047300	Ext Tooth Lockwasher No 10 (not shown)
115	10	HT552509	Tap SC No 8-16 x .31 Plastite Pn
116	1	PP620000	Top Console
117	1	SW-17005-4	600A Switch Membrane Top
118	1	SW-17006-4	600A Switch Membrane Bottom

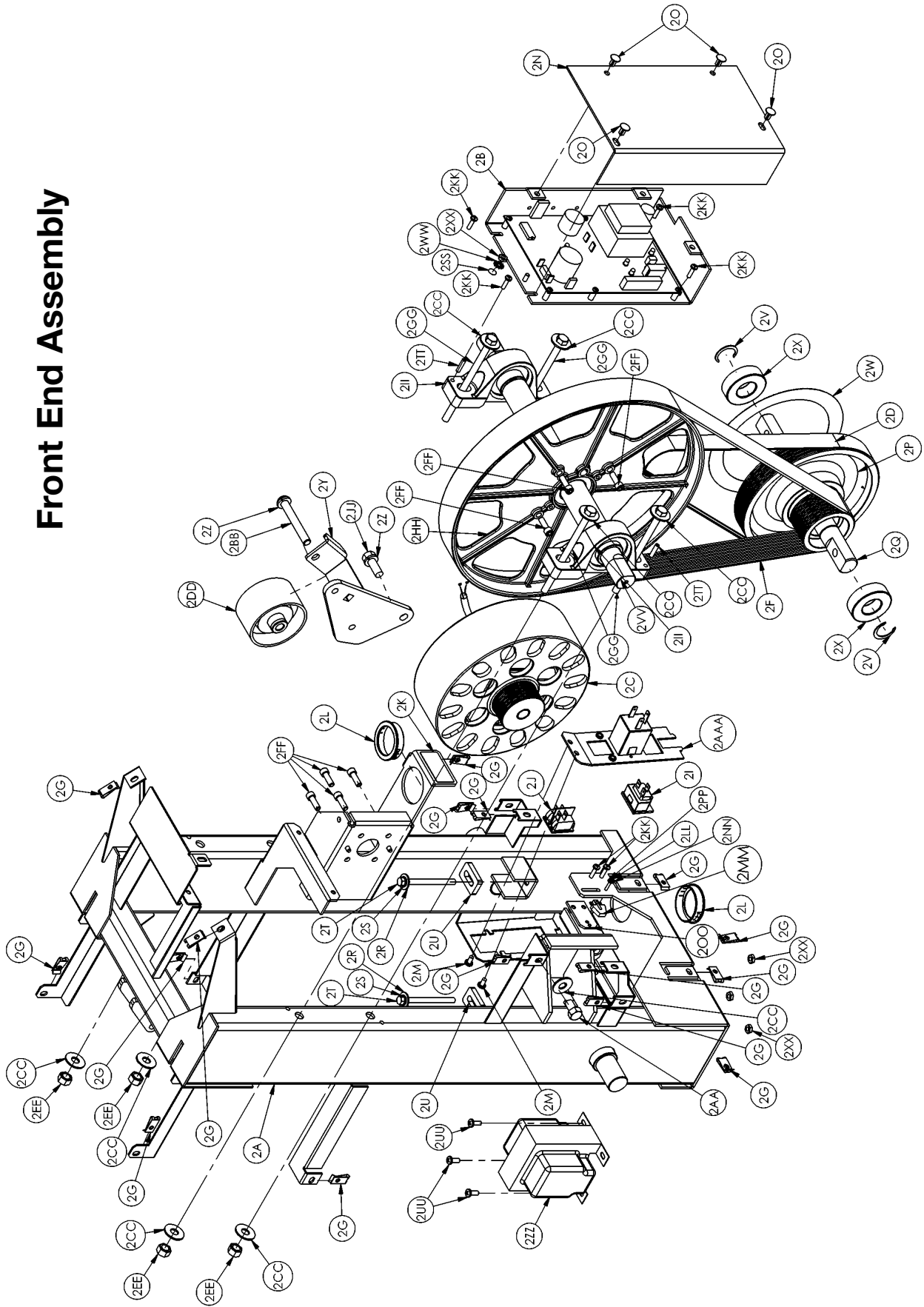
Handrail Assembly



Front End Assembly

ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
2	1	AX-17156	Front End Assembly	2BB	1	HC700432	Screw 3-8-16 x 2.75 Button
2A	1	AF-16483	Front End	2CC	9	HS347700	Washer USS .375
2B	1	AD-16982	PCA Control Board 115V	2DD	1	CW-17063	Tensioner Wheel
2C	1	AX-17208	ECB Assembly	2EE	4	HN706300	Nut Keps 3-8-16 Hex Stl
2D	1	600A-322	Secondary Drive Belt	2FF	8	HS-17055	SHCS .25-20 x .75
2E	1	BD-16671	Removed 11/02	2GG	4	HC701252	3-8-16 x 5.25
2F	1	BD-16671	Primary Drive Belt	2HH	1	PW-17016	Poly-V Drive Die Cast Pulley
2G	16	HF579000	Panel Fastener 10-24 U Type	2II	2	AF-16694	Pillow Block Assembly
2H	1	EC-17097	Removed 11/02	2JJ	1	HC701214	HHCS .375 x .625
2I	1	EC-17097	Power Outlet IEC320 Module	2KK	6	HJ542514	Screw 8-32 x .625
2J	1	ES000000	Switch On-Off	2LL	1	HM522514	Screw #4-40 x .62 Phil Ph
2K	1	DE-17155-4	Warning Decal	2MM	1	EW600003	Cable Speed Sensor
2L	2	HX-17050	Nylon Insulating Bushing	2NN	1	HS048300	Split Lockwasher
2M	2	HJ582510	SEMS 10-32 x 3/8 pan hd, ext	2OO	1	AF-17141	Speed Sensor Bracket
2N	1	PL-17237-4	Controller Cover	2PP	1	HS047600	Washer
2O	4	PP660010	Single Head Christmas Tree Clip	2QQ	1	AW-17099	Power Inlet Blue Jumper (not shown)
2P	1	PW-16521	Lower Machined Pulley	2RR	1	AW-17098	Power Inlet Brown Jumper (not shown)
2Q	1	FM-16859	Lower Pivot Shaft	2SS	1	CM000237	Ground Symbol Label
2R	2	HS307600	Washer	2TT	2	HX-17023	Spring Pin
2S	2	HS308300	Split Lock Washer	2UU	3	HJ582512	Tap Sc No. 10-24 x .50 Pn Hd Phil (220V option only)
2T	2	HS-17145	Hex 1-4-20 x 3.00 Tap 8G	2VV	1	AF-16461	Crank Shaft
2U	2	FM-17146	10 Rib Belt Spacer	2WW	1	HS047300	Lockwasher Ext No. 10
2V	2	BR030221	Retaining Ring	2XX	4	HN586300	Keps 10-32 stl
2W	1	DE-17019	Speed Sensor Disc	2YY	2	EF000000	Fuse 6Aski-Blo 5 x 20Mm 250V
2X	2	FB030243	Bearing 25M mid x 52M mod 6205	2ZZ	1	AX-17259	Transformer 200KVA (220V option only)
2Y	1	AF-17060	Rocker Arm	2AAA	1	600AK003	Arc Trainer Filter Power Input Module/Power Switch Plate Kit
2Z	2	HS348300	Split Lockwasher .375				
2AA	1	HC701217	HHCS .375 x 1.00				

Front End Assembly



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