SPIRIT

CE850 Elliptical
OWNER'S MANUAL

Please carefully read this entire manual before operating your new elliptical.

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ATTENTION
This elliptical is intended for residential use only and is warranted for this application. Any other application voids this warranty in its entirety.

IMPORTANT **SAFETY INSTRUCTIONS**

WARNING - Read all instructions before using this appliance.

DANGER - To reduce the risk of electric shock disconnect your elliptical from the electrical outlet prior to cleaning and/or service work.

WARNING - To reduce the risk of burns, fire, electric shock, or injury to persons, install the elliptical on a flat level surface with access to a 120/230-volt, 5-amp grounded outlet with only the elliptical plugged into the circuit.

DO NOT USE AN EXTENSION CORD UNLESS IT IS A 14AWG OR BETTER, WITH ONLY ONE OUTLET ON THE END: DO NOT ATTEMPT TO DISABLE THE GROUNDED PLUG BY USING IMPROPER ADAPTERS, OR IN ANY WAY MODIFY THE CORD SET.

A serious shock or fire hazard may result along with computer malfunctions. See Grounding Instructions, page 3.

- Do not operate elliptical on deeply padded, plush or shag carpet. Damage to both carpet and elliptical may result.
- Keep children away from the elliptical. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the elliptical if it has a damaged cord or plug. If the elliptical is not working properly, call your dealer.
- Keep the cord away from heated surfaces.
- Do not operate where aerosol spray products are being used or where oxygen is being administered. Sparks from the motor may ignite a highly gaseous environment.
- Never drop or insert any object into any openings.
- Do not use outdoors.
- To disconnect, turn all controls to the off position, then remove the plug from the outlet.
- Do not attempt to use your elliptical for any purpose other than for the purpose it is intended.
- The hand pulse sensors are not medical devices. Various factors, including the user's movement, may affect the accuracy of heart rate readings. The pulse sensors are intended only as exercise aids in determining heart rate trends in general.
- Wear proper shoes. High heels, dress shoes, sandals or bare feet are not suitable for use on your elliptical. Quality athletic shoes are recommended to avoid leg fatigue.
- Keep children under the age of 13 away from this machine.
- This exercise equipment is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
- Before beginning this or any exercise program, consult a physician. This is especially important for persons over the age of 35 or persons with pre-existing health conditions.
- Close supervision is necessary when this exercise equipment is used by, on, or near children, invalids, or disabled persons.

SAVE THESE INSTRUCTIONS - THINK SAFETY!

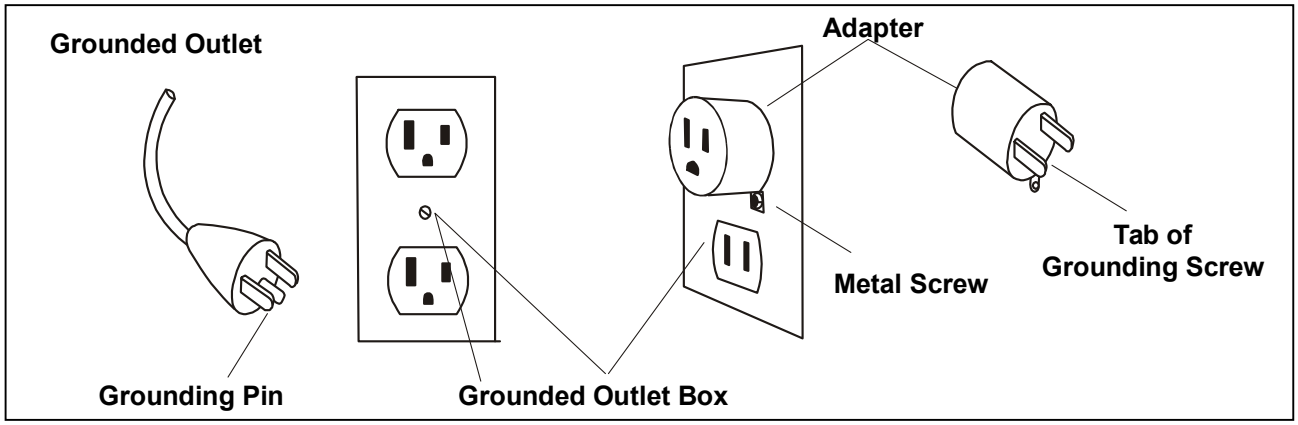
IMPORTANT **ELECTRICAL INSTRUCTIONS**

WARNING!

NEVER remove any cover without first disconnecting AC power.
If voltage varies by ten percent (10%) or more, the performance of your elliptical may be affected. **Such conditions are not covered under your warranty.** If you suspect the voltage is low, contact your local power company or a licensed electrician for proper testing.
NEVER expose this elliptical to rain or moisture. This product is **NOT** designed for use outdoors, near a pool or spa, or in any other high humidity environment. The operating temperature specification is 40 to 120 degrees Fahrenheit, and humidity is 95% non-condensing
(no water drops forming on surfaces).

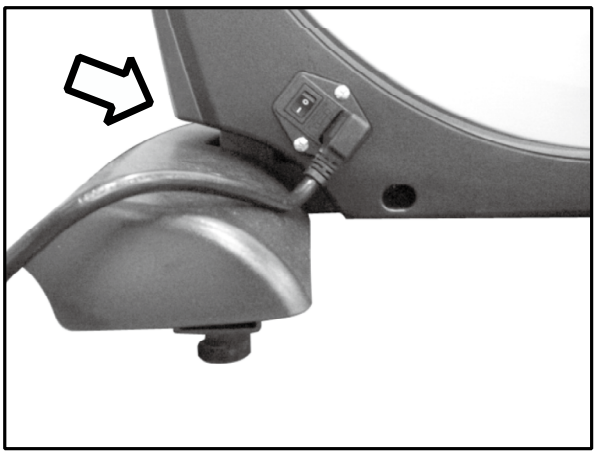
GROUNDING INSTRUCTIONS

This product must be grounded. If the elliptical should malfunction or breakdown, grounding provides a path of least resistance for electric current, reducing the risk of electric shock. This product is equipped with a cord having an equipment-grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product if it will not fit the outlet; have a proper outlet installed by a qualified electrician. This product is for use on a nominal 120-volt circuit, and has a grounding plug that looks like the plug illustrated below. A temporary adapter that looks like the adapter illustrated below may be used to connect this plug to a 2-pole receptacle as shown below if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet, (shown below) can be installed by a qualified electrician. The green colored rigid ear-lug, or the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw.



IMPORTANT **OPERATION INSTRUCTIONS**

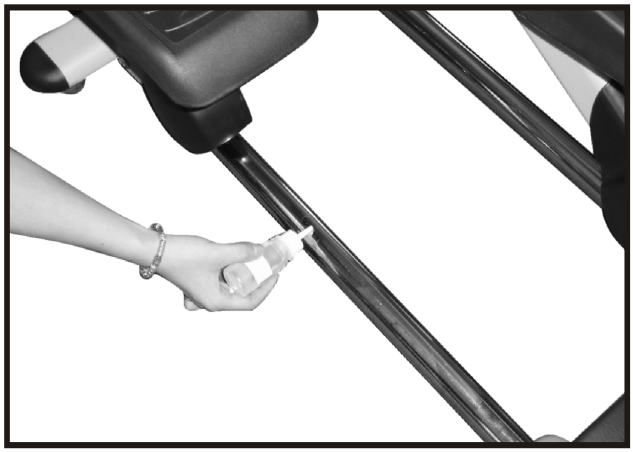
- **NEVER** operate this elliptical without reading and completely understanding the results of any operational change you request from the computer.
- Understand that changes in resistance and incline do not occur immediately. Set your desired resistance on the computer console and release the adjustment key. The computer will obey the command gradually.
- **NEVER** use your elliptical during an electrical storm. Surges may occur in your facility or household power supply that could damage elliptical components. Unplug the elliptical during an electrical storm as a precaution.
- Use caution while participating in other activities while pedaling on your elliptical; such as watching television, reading, etc. These distractions may result in serious injury.
- Always hold on to a handrail or hand bar while making control changes (incline, resistance, etc.).
- Do not use excessive pressure on console control keys. They are precision set to function properly with little finger pressure. Pushing harder is not going to make the unit go faster or slower. If you feel the buttons are not functioning properly with normal pressure contact your dealer.



POWER CONNECTOR - FRONT, LEFT SIDE OF UNIT

Elliptical Lubrication

1. Pour 2c.c of the lubricant under the middle of the rail. You must lubricate the rails every three months.
2. If you feel the exercise is not smooth or you hear noise during your exercise, lubricate the middle rail with 2 c.c.of the lubricant.

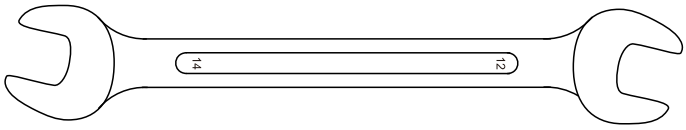


Assembly Instructions

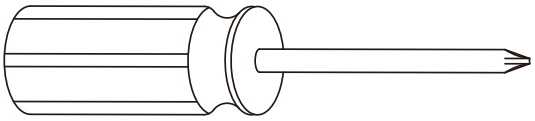
PRE-ASSEMBLY

1. Using a razor knife (Box Cutter), cut the banding straps that wrap around the carton. Reach under the bottom edge of the carton and pull it away from the cardboard underneath, separating the staples that join the two together. Lift the box over the unit and unpack.
2. Carefully remove all parts from carton and inspect for any damage or missing parts. If damaged parts are found, or parts are missing, contact your dealer immediately.
3. Locate the hardware package. The hardware is separated into four steps. Remove the tools first. Remove the hardware for each step as needed to avoid confusion. The numbers in the instructions that are in parenthesis **(#)** are the item number from the assembly drawing for reference.

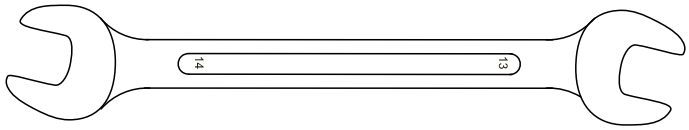
Assembly Tools



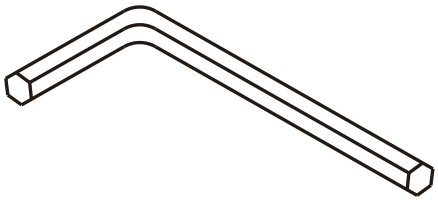
#195. 12/14 mm
Double Open End Wrench (1 pc)



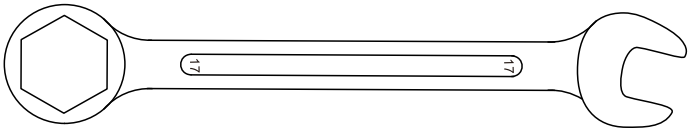
#192. Phillips Head Screw driver (1 pc)



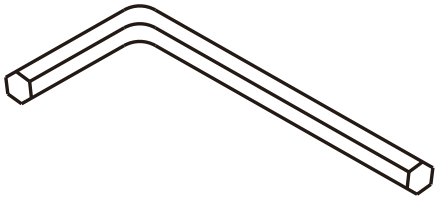
#194. 13/14 mm
Double Open End Wrench (1 pc)



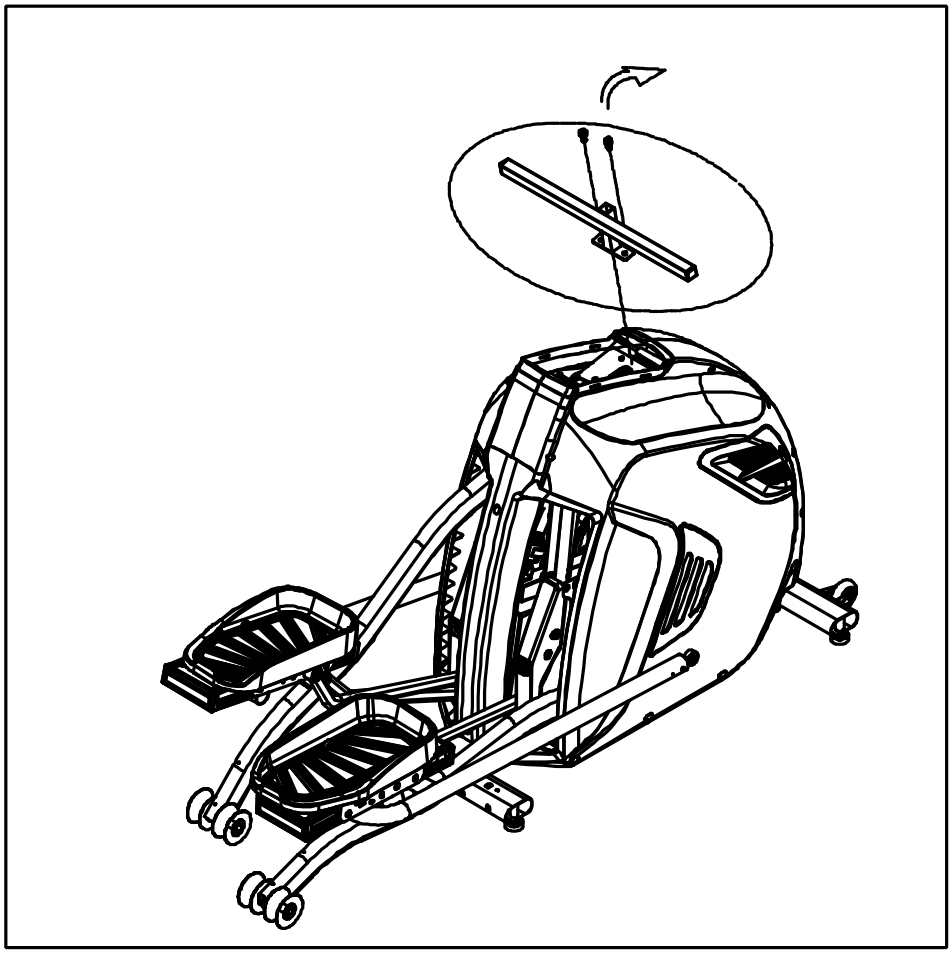
#193. M8 L Allen Wrench (1 pc)



#201. 17mm Open End Combination
Spanner Wrench (1 pc)

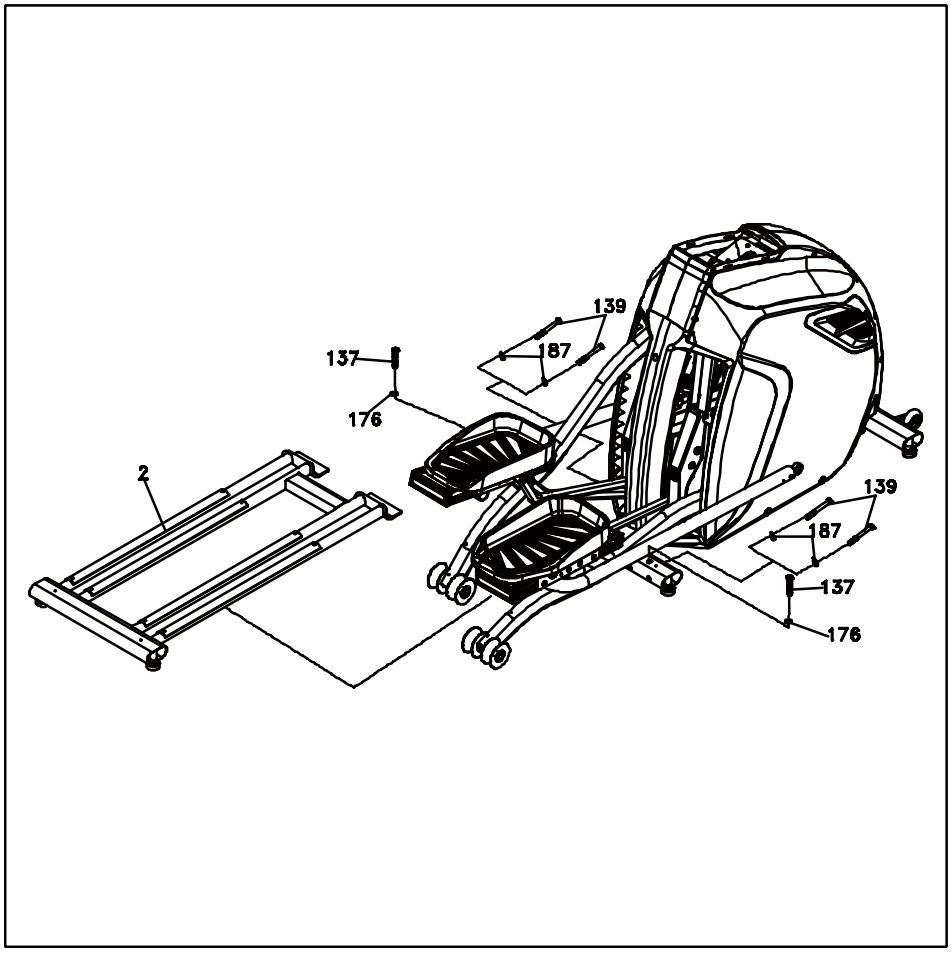


#200. M12 L Allen Wrench (1 pc)



STEP 0

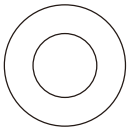
Use **L Allen Wrench (193)** to remove two **3/8”x3/4”_Socket Head Cap Bolts** tightening the **Side Back (17)** onto the mounting plate on the **Main Frame.** Take the **Side Back** apart and throw the rest away.



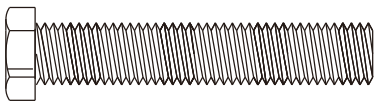
STEP 1

1. Gather **HARDWARE FOR STEP 1**.
2. Put the 2 **FLAT WASHERS** (**176**) on the 2 **HEX HEAD BOLTS** (**137**) and hand-tighten them, through the **TOP** of the **MIDDLE STABILIZER TUBE** , into the **REAR RAIL ASSEMBLY** (**2**) with the **WRENCH** (**194**).
3. Put 4 **CURVED WASHERS** (**187**) on the 4 **HEX HEAD BOLTS** (**139**) and hand-tighten them through the **FRONT** of the **MIDDLE STABILIZER TUBE,** into the **REAR RAIL ASSEMBLY** (**2**) with the **WRENCH** (**194**).

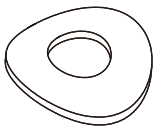
HARDWARE



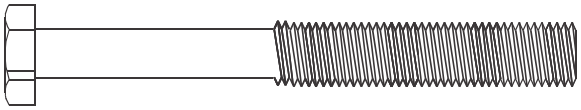
#176. 3/8" x 19 x 1.5T
Flat Washer
(2 pcs)



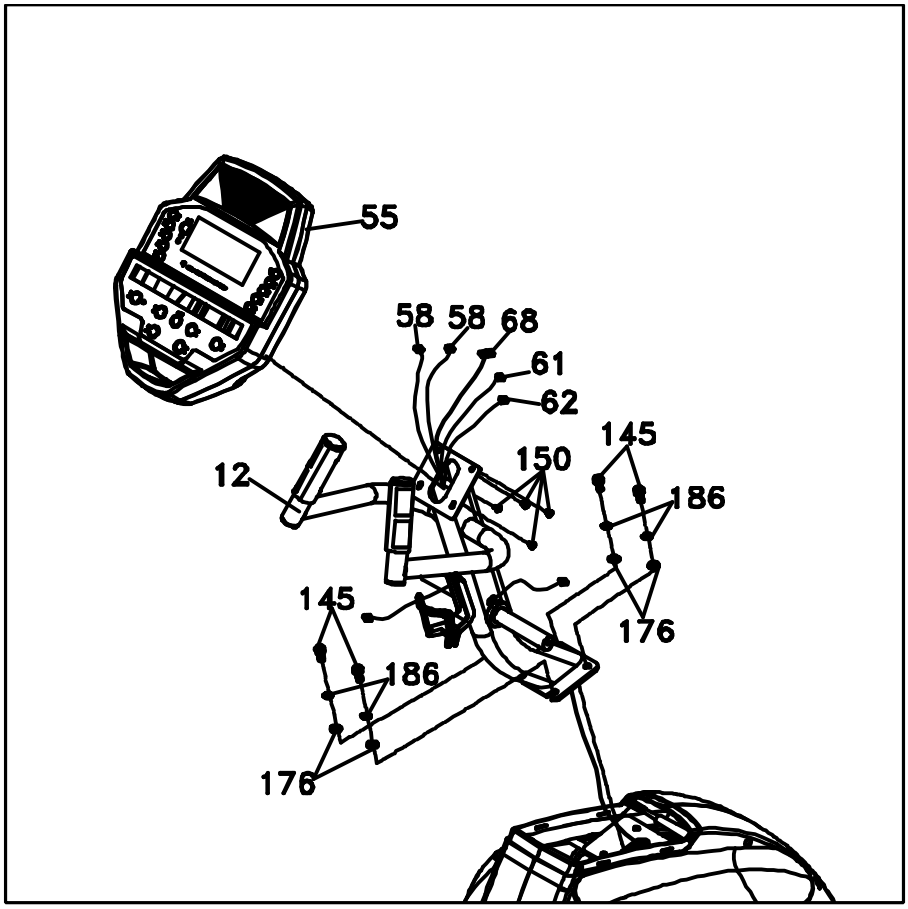
#137. 3/8" x 2-1/4"
Hex Head Bolt
(2 pcs)



#187. 3/8" x 23 x 2T
Curved Washer
(4 pcs)



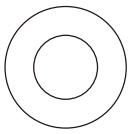
#139. 3/8" x 3-3/4"
Hex Head Bolt
(4 pcs)



STEP 2

1. Gather **HARDWARE FOR STEP 2**.
2. Use **WRENCH** (**193**) to release 2 **SOCKET HEAD CAP BOLTS** and take apart side back disposed. Pierce 14P **COMPUTER CABLE** (**68**) from bottom of the mast tube through it and pull out of the top. Use 4 **SOCKET HEAD CAP BOLTS** (**145**), 4 **SPRING WASHERS** (**186**) and 4 **FLAT WASHERS** (**176**) to secure.
3. Untie the **COMPUTER CABLE** (**68**) , connect 2 **HANDPULSE W/CABLE ASSEMBLY** (**58**) and **HANDLE WIRE** (Upper), **RESISTANCE/ INCLINE** (White/Red) (**61/62**) with the **CONSOLE ASSEMBLY** (**55**) respectively. Then place the **CONSOLE** on top of the **MAST** and use **PHILLIPS HEAD SCREW DRIVER** (**192**) to tighten 4 **PHILLIPS HEAD SCREWS** (**150**) to secure.

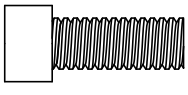
HARDWARE



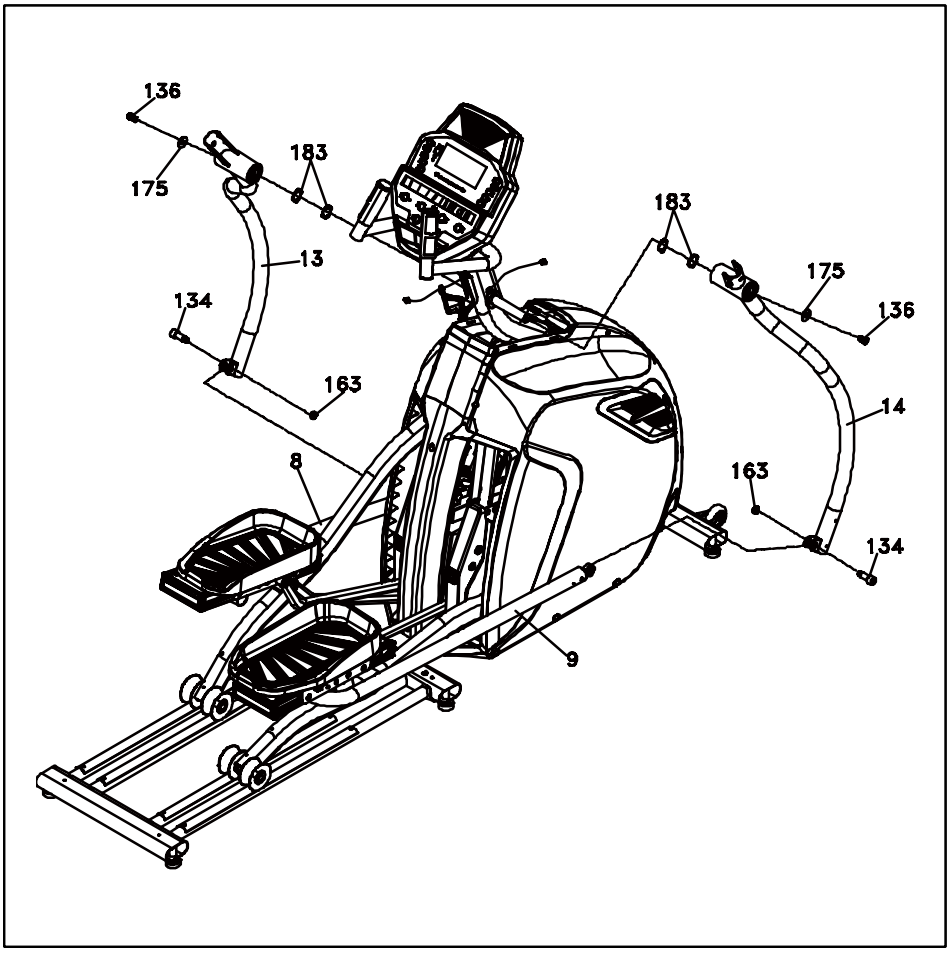
#176. 3/8" × 19 × 1.5T Flat Washer (4 pcs)

#186. 3/8" × 2T Spring Washer (4 pcs)

#150. M5 × 10m/m Phillips Head Screw (4pcs)



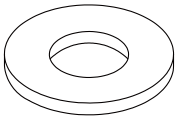
#145. 3/8”X3/4” Socket Head Cap Bolt (4 pcs)



STEP 3

1. Gather **HARDWARE FOR STEP 3**.
2. Locate **LEFT** and **RIGHT LOWER SWING ARMS** (**13, 14**) together with 4 **WAVE WASHERS** onto **LEFT** and **RIGHT SHAFTS** of the **MAST TUBE** then tighten with 2 **HEX HEAD BOLTS** (**136**) and two **FLAT WASHERS** (**175**) by using the **WRENCH** (**194**).
3. Untie Rod end Bearing on **LEFT CONNECTING ARM** (**8**) and pierce **HEX HEAD BOLT** (**134**) through the rod end holes and rod end bearing then tighten with **NYLOC NUT** (**163**) by using the **WRENCH** (**194**) and **WRENCH** (**195**). Do it the same way for **RIGHT CONNECTING ARM** (**9**) and **RIGHT LOWER HANDLE BAR** (**14**).

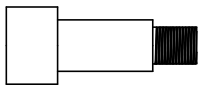
HARDWARE



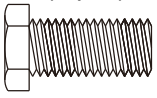
#175. 3/8" × 30 × 2.0T
Flat Washer
(2 pcs)

#163 M10 x8T
Nyloc Nut
(2 pcs)

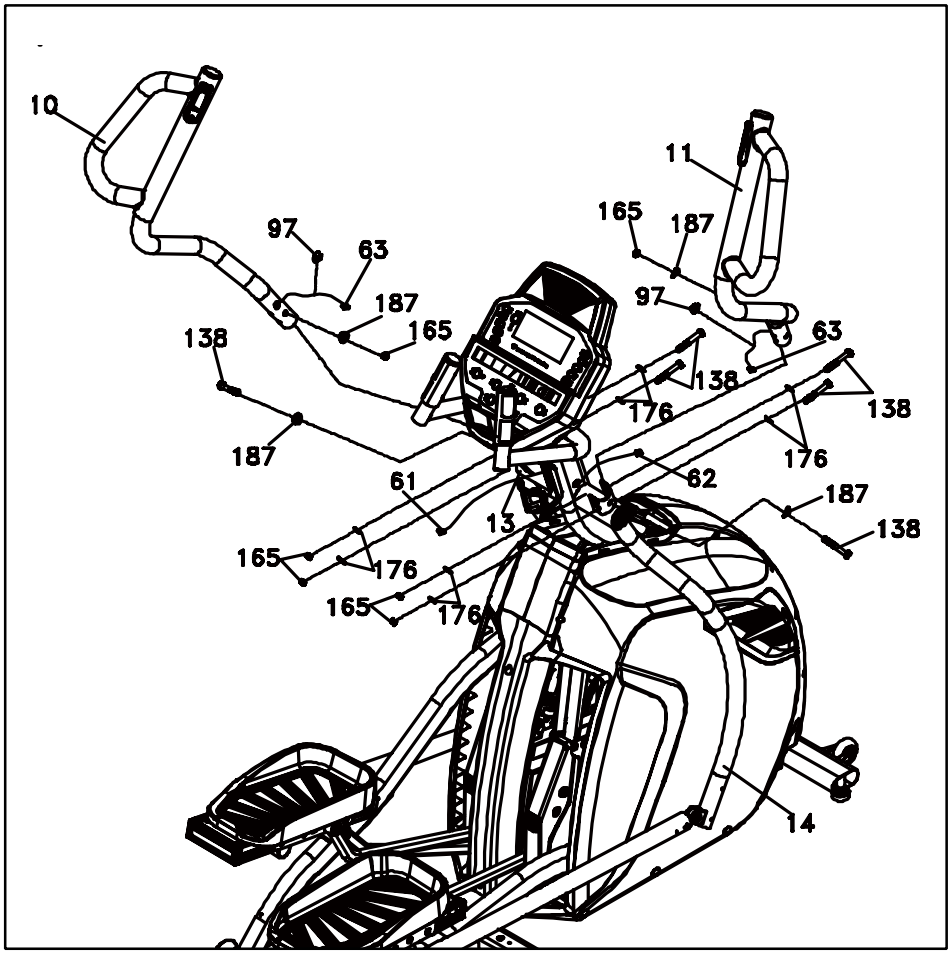
#183. ø25 Wave Washer
(4 pcs)



#134. M10 × 1.5 Bolt
(2 pcs)



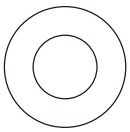
#136. 3/8" x 3/4"
Hex Head Bolt
(2 pcs)



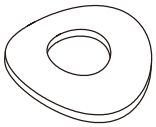
STEP 4

1. Gather **HARDWARE FOR STEP 4**.
2. Insert **LEFT UPPER SWING ARM** (**10**) onto **LEFT LOWER SWING ARM** (**13**) and secure with 3 **HEX HEAD BOLTS(138**), 4 **FLAT WASHERS** (**176**), 2 **CURVED WASHERS** (**187**) and 3 **NYLOC NUTS** (**165**) by using **WRENCH** (**194**) and **WRENCH** (**195**). Do it the same way for **RIGHT UPPER SWING ARM**(**11**) and **RIGHT LOWER SWING ARM** (**14**).
3. Connect **HANDLE WIRE** (**UPPER**), **RESISTANCE**(**WHITE, 61**) and **HANDLE WIRE** (**UPPER**), **STRIDE**(**RED, 62**) to 2 **HANDLE WIRES** (**LOWER**), **RESISTANCE/STRIDE** (**63**)respectively and save the excessive wires in the mast tube. Finally, plug in **SWITCH WIRE CAPS** onto the **MAST TUBE** to secure the wire.

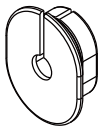
HARDWARE



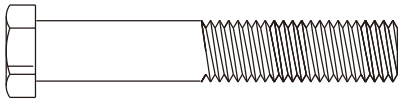
#176. 3/8" ×19 × 1.5T
Flat Washer
(8 pcs)



#187. 3/8" × 23 × 2.0T
Curved Washer
(4 pcs)

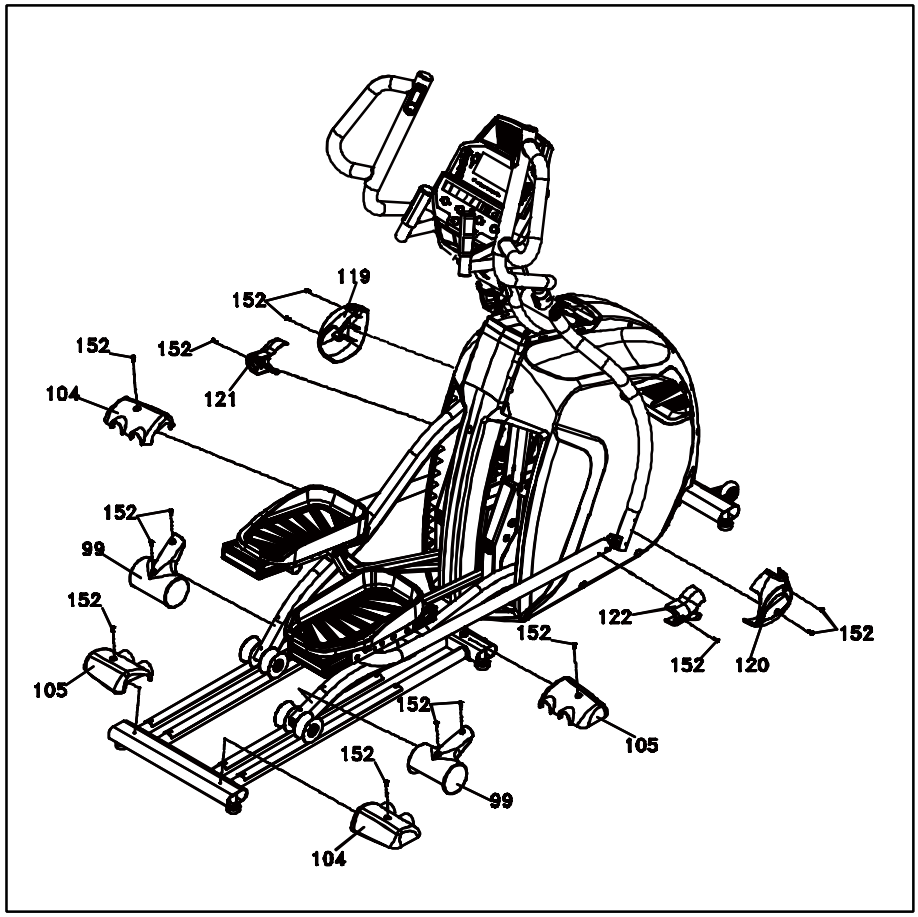


#97. Switch Wire Cap
(2 pcs)



#138. 3/8" x 2-1/4"
Hex Head Bolt
(6 pcs)

#165. 5/16" x7T
Nyloc Nut
(6 pcs)

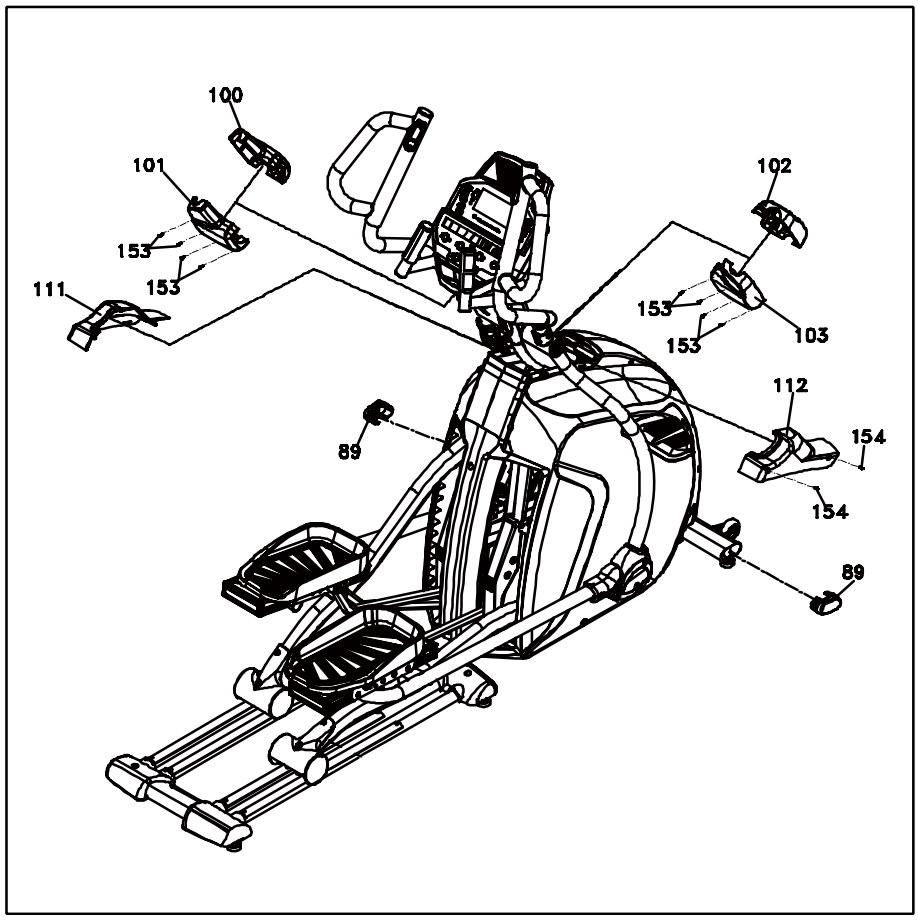


STEP 5

1. Gather **HARDWARE FOR STEP 5**.
2. Secure **LEFT CONNECTING ARM COVER B** (**121**) on left Connecting Arm with **PHILLIPS HEAD SCREW** (**152**) by using **PHILLIPS HEAD SCREW DRIVER** (**192**) then secure **LEFT CONNECTING ARM COVER A** (**119**) with 2 **PHILLIPS HEAD SCREWS** (**152**) on Lower Handle Bar. Do it the same way for **RIGHT CONNECTING ARM COVER B** (**122**) and **RIGHT CONNECTING ARM COVER A** (**120**) on right Connecting Arm and right Lower Handle Bar**,** respectively.
3. Secure 2 **SLIDE WHEEL COVERS** (**99**) on both **LEFT** and **RIGHT PEDAL ARMS** with 4 **PHILLIPS HEAD SCREWS**(**152**) by using **PHILLIPS HEAD SCREW DRIVER** (**192**).
4. Use **PHILLIPS HEAD SCREW DRIVER** (**192**) with 4 **PHILLIPS HEAD SCREWS**(**152**) Secure 2 **REAR STABILIZER COVERS** (**A**) (**104**) and 2 **REAR STABILIZER COVER** (**B**) (**105**) on both left and right sides of rear tube of rear rail assembly.

HARDWARE

#152. M5 ×15m/m
Phillips Head Screw
(14 pcs)

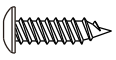


STEP 6

1. Gather **HARDWARE FOR STEP 6**.
2. Match **LEFT** and **RIGHT CONSOLE MAST COVERS** (**111, 112**) with **LEFT** and **RIGHT** side cases respectively and secure with 2 **SHEET METAL SCREWS** (**154**) by using **PHILLIPS HEAD SCREW DRIVER** (**192**).
3. Match **FRONT HANDLE BAR COVER** (**100**) and **REAR HANDLE BAR COVER** (**101**) with each other on **LEFT LOWER HANDLE BAR** and use **PHILLIPS HEAD SCREW DRIVER** to tighten 4 **SHEET METAL SCREWS** (**153**). Do the same for **RIGHT FRONT HANDLE BAR COVERS** (**102**) and **REAR HANDLE BAR COVER** (**103**). (Be aware not to pinch the wire)
4. Plug in both **OVAL END CAPS** (**89**) onto both ends of the **FRONT STABILIZER TUBE**.

HARDWARE

#153. 3.5 × 12m/m
Phillips Head Screw
(8pcs)



#154. 4 × 15m/m
Phillips Head Screw
(2pcs)

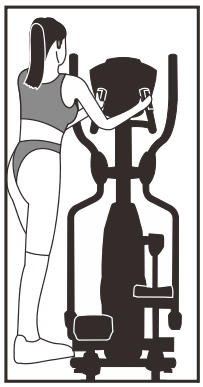
Getting on / off your elliptical

IMPORTANT

The elliptical comes with two Dual Action Handles and a Stationary Handlebar. Always hold the Stationary Handlebar when getting on and off the elliptical. First time users should familiarize themselves with using the elliptical by using the Stationary Handlebar first and then progressing to the Dual Action Handles.

Once you have familiarized yourself with using the elliptical, you can progress to using the Dual Action Handles to provide a total body workout. Hands can be positioned on the Dual Action Handles at the most appropriate position for your height and arm length.

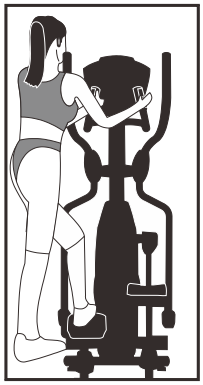
Caution should always be taken when getting on and off any exercise machine. Please follow the safety steps below.

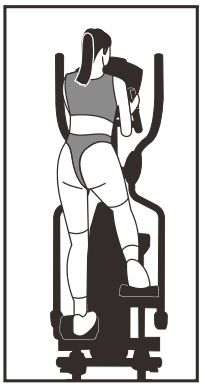


Ensure the left Foot Pedal is in the lowest position and grasp the Stationary Handlebar with both hands.

Place your left foot on the left Foot Pedal and get secure.

Lift your right foot over machine and place on right Foot Pedal. Get balanced and begin your workout.



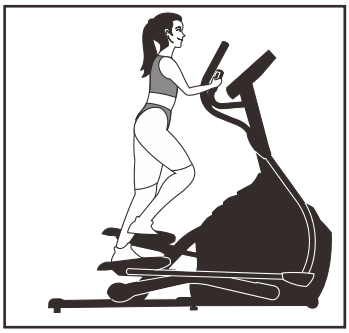


Important

To get off, come to a complete stop and reverse the procedure.
Always wear rubber-soled shoes, such as tennis shoes.
It is recommended that you keep at least one hand on the Stationary Handlebar at all times, especially when getting on or off. If you are performing a walking action with your arms, or doing upper body strength training exercises, ensure you are well balanced.
All equipment should be set-up and operated on solid, level surfaces.

Correct Position

Your body should be in an upright position so that your back is straight. Keep your head up to minimize neck and upper back strain.
Always try and use the elliptical in a rhythmical and smooth motion. If you find yourself feeling uncomfortable, or experience a surging type feeling, there is probably too much tension.



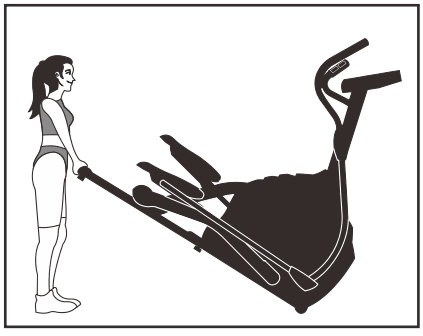
The elliptical can be used in forward or reverse notion.

When going in reverse, bend your knees slightly more. More emphasis is on the buttocks and hamstrings in the reverse motion.

MOVING YOUR ELLIPTICAL

The elliptical can be easily moved.

1. At the rear of the machine squat down and grasp the rear stabilizer bar.



2. Lift the rear of the machine using your legs until the wheels in the front engage with the ground.

Operation Of Your Console

Fan to keep you cool

Ten innovative programs offer a variety of work-outs

Heart Rate % Profile

Easy-Touch Control Buttons

Large Blue-LED Matrix Window

20-Character Message Center

Convenient cargo compartment for keys, phone, or MP3 player

POWER

When the A.C. power cord is connected to the Elliptical, the console will automatically power up. In stand-by mode the console display will turn off. To turn the console on press any key.

When initially powered on the console will perform an internal self-test. During this time all the lights will turn on. When the lights go off, the Message Center will show the software version (i.e.: VER 1.0). The window shows the distance total and total hours of use.

The odometer will remain displayed for only a few seconds then the console will go to the start up display. The dot matrix display will be scrolling through the different profiles of the programs and the Message Center will be scrolling the start up message. You may now begin to use the console.

Console Operation

Quick Start

This is the quickest way to start a workout. You just press the Start key to begin. This will initiate the Quick Start mode. In Quick Start the Time will count up from zero, all workout data will start to accrue and the workload may be adjusted manually by pressing the Up and Down buttons. The dot matrix display will show a ¼ mile (0.4KM) track display or just the bottom row lit at first or stride level, depending on how the display button has been set (see Basic information below). As you increase the workload more rows will light indicating a harder workout. The elliptical will get harder to pedal as the rows increase. The dot matrix has 24 columns of lights and each column represents 1 minute. At the end of the 24th column (or 24 minutes of work) the display will wrap around and start at the first column again.

There are 20 levels of resistance – displayed as 10 rows of lights - available for plenty of variety. The first 5 levels are very easy workloads, and the changes between levels are set to a good progression for de-conditioned users. Levels 5-10 are more challenging but the increases from one level to the next remain small. Levels 10-15 start getting tough as the levels jump more dramatically. Levels 15-20 are extremely hard and are good for short interval peaks and elite athletic training.

Basic information

The Dot Matrix, or Profile Window, has three display modes. When you begin a program the dot matrix will display the workout Profile. To the left of the dot matrix there is a button labeled Display. Pressing this button once will switch the display to show a stride level, Button is pressed again the dot matrix will switch quarter mile track. If the Display button is pressed again the dot matrix will switch back and forth between Track and Profile and stride mode every few seconds. To turn off the scan mode press the Display key again. This will return you to the profile display mode.

The **Message Window** will initially be displaying Time and Distance information. On the bottom left of the message window is a button labeled Display. Each time this Display button is pressed the next set of information will appear, four windows in all. In order: Time and Distance, Pulse and Kcal (Calories), Speed in RPM and MPH, Work Level and Watts, then METs. If the Display button is pressed during the METs display the Scan light will come on and the message window will show each set of data for four seconds then switch to the next set of data in a continuous loop. Pressing the Display button again will bring you back to the beginning.

Below the Dot matrix display is a **Heart Icon** and a **Bar Graph.** The Elliptical has a built in heart rate monitoring system. Simply grasping the hand pulse sensors, or wearing a heart rate chest belt transmitter, will start the **Heart Icon** blinking (this may take a few seconds). The Message Window will display your heart rate, or Pulse, in beats per minute. The **Bar Graph** represents the percentage of your maximum heart rate you are currently achieving. NOTE: You must enter your age during program setup for the Bar Graph to be accurate. Refer to Heart Rate section for details about these features and how they can help you work out more efficiently.

The **Stop/Reset** button actually has several functions. Pressing the Stop/Reset key once during a program will **Pause** the program for 5 minutes (when you stop pedaling the display will turn off but the memory will be saved for 5 minutes just like the pause mode). If the Stop/Reset button is pressed twice during a workout the program will end and the console will return to the start up screen. If the Stop/Reset key is held down for 3 seconds the console will perform a complete **Reset.** During data entry for a program the Stop/Reset key performs a **Previous Screen** function. This allows you to go back one step in the programming each time you press the Stop/Reset key.

The **Program Keys** are used to preview each program. When you first turn the console on you may press each program key to preview what the program profile looks like. If you decide that you want to try a program, press the corresponding program key and then press the Enter key to select the program and enter into the data-setup mode.

The program keys also act as a **Number Key Pad** when you are in the data-setup mode. Under each program key is a number. If you are setting new data such as Age, weight etc., you can use these keys to enter the numbers quickly.

The console includes a built-in fan to help keep you cool. To turn the fan on press the key on the right side, front of the console

PROGRAMMING THE CONSOLE

Each of the programs can be customized with your personal information and changed to suit your needs. Some of the information asked for is necessary to ensure the readouts are correct. You will be asked for your **Age** and **Weight**. Entering your **Age** ensures that the Heart Rate bar graph shows the correct number. Your Age is also necessary during the Heart Rate control program to ensure the correct settings are in the program for your Age. Otherwise the work settings could be too high or low for you; entering your **Weight** aides in calculating a more correct **Calorie** reading. Although we cannot provide an exact calorie count we do want to be as close as possible.

Entering/Changing Settings

When you enter a program (by pressing a program key, then enter key) you have the option of entering your own personal settings. If you want to workout without entering new settings then just press the Start key. This will bypass the programming of data and take you directly to the start of your workout. If you want to change the personal settings then just follow the instructions in the message window. If you start a program without changing the settings the default - or pre-saved – settings will be used.

Manual

The Manual program works as the name implies, manually. This means that you control the workload yourself and not the computer. To start the Manual program follow the instructions below or just press the Manual button then the Enter button and follow the directions in the message window.

1. Press the **Manual** key then press the **Enter** key.
2. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys, or the numeric key pad, then press enter to continue.
4. The next setting is **Time**. You may adjust the Time and press enter to continue.
5. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
6. The program automatically starts you at level one. This is the easiest level and it is a good idea to stay at level one for a while to warm up. If you want to increase the work load at any time press the Up key; the Down key will decrease the workload.
7. During the Manual program you will be able to scroll through the data in the message window by pressing the adjacent **Display key**. You may also switch between the profile display and a quarter mile track by pressing the Display key adjacent to the dot matrix display.
8. When the program ends you may press Start to begin the same program again or Stop to exit the program, or you can save the program you just completed as a **custom program** by pressing the Custom key and following the instructions in the message window.

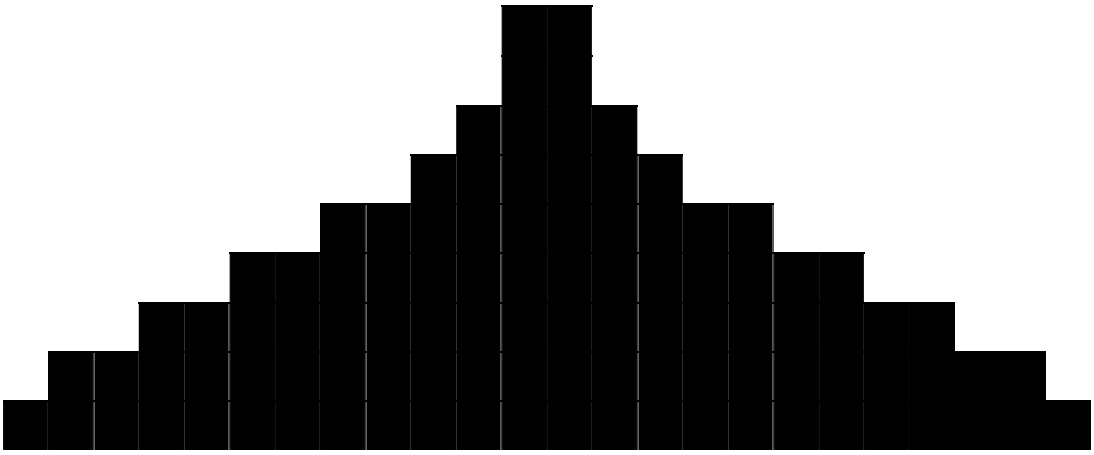
Preset Programs

The elliptical has five different programs that have been designed for a variety of workout goals. These five programs have factory preset profiles for achieving these different goals. The initial built-in level of difficulty for each program is set to a relatively easy level. You may adjust the level of difficulty (Max level) for each program before beginning by following the instructions in the message window after selecting your program.

HILL

The **Hill** program simulates going up and down a hill. The resistance in the pedals will steadily increase and then decrease during the program.

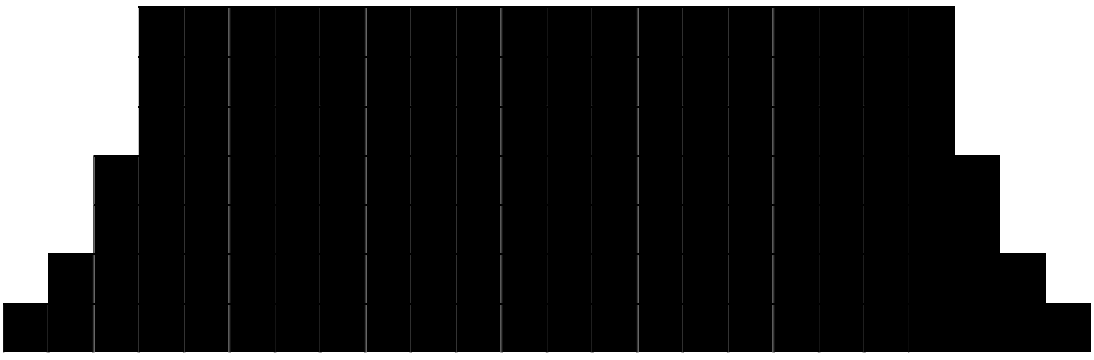
RESISTANCE LEVEL



FATBURN

The **Fat Burn** program is designed, as the name implies, to maximize the burning of fat. There are many schools of thought on the best way to burn fat but most experts agree that a lower exertion level that stays at a steady workload is the best. The absolute best way to burn fat is to keep your heart rate at around 60% to 70% of its maximum potential. This program does not use heart rate but simulates a lower, steady exertion workout.

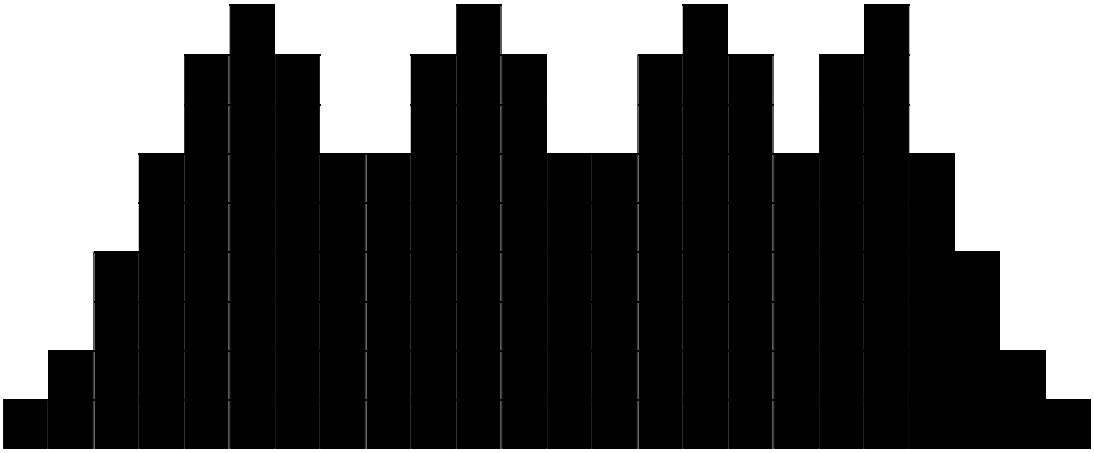
RESISTANCE LEVEL



CARDIO

The **Cardio** program is designed to increase your Cardio vascular function. This is exercise for your heart and lungs. It will build up your heart muscle and increase blood flow and lung capacity. This is achieved by incorporating a higher level of exertion with slight fluctuations in work.

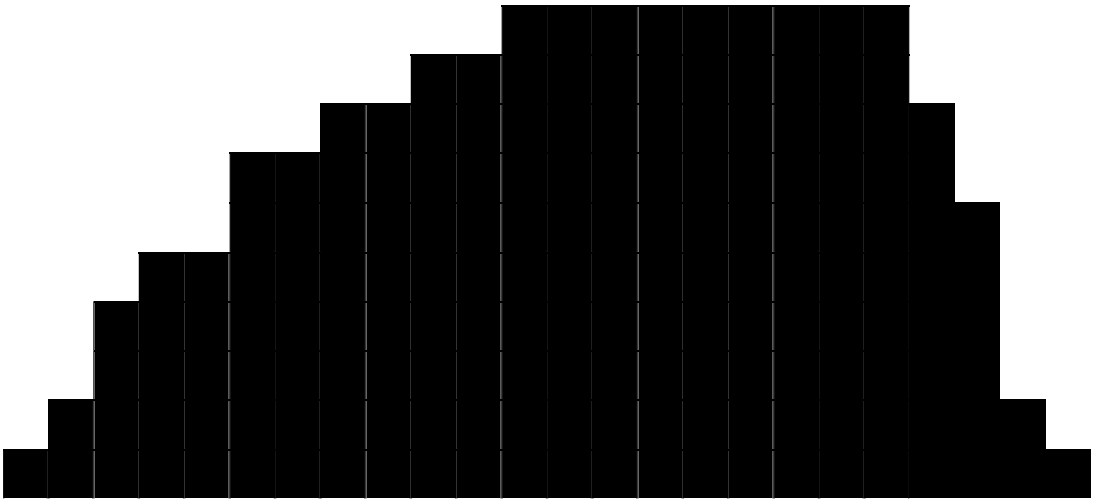
RESISTANCE LEVEL



STRENGTH

The **Strength** program is designed to increase muscular strength in your lower body. This program will steadily increase in resistance to a high level and then keeps you there. This is designed to strengthen and tone your legs and glutes.

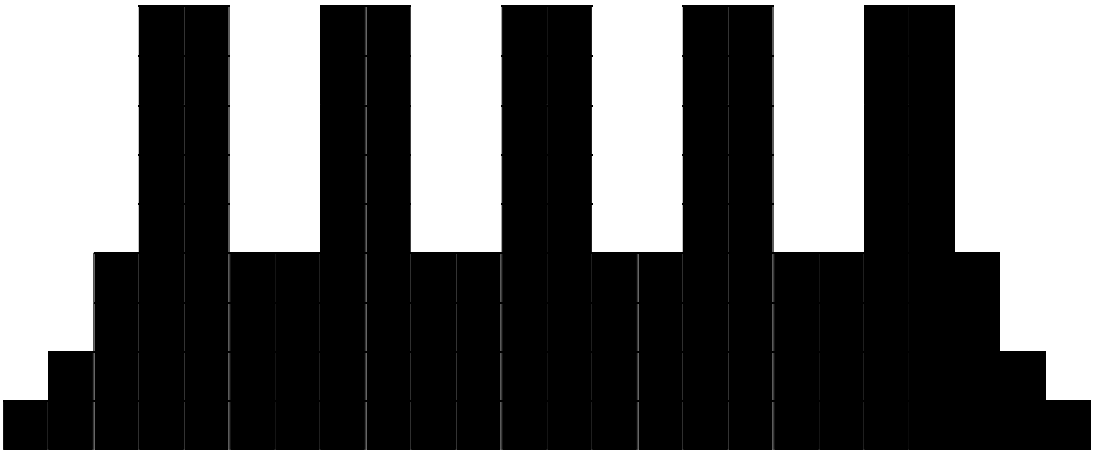
RESISTANCE LEVEL



INTERVAL

The **Interval** program takes you through high levels of intensity followed by periods of low intensity. This program increases your endurance by depleting your oxygen level followed by periods of recovery to replenish oxygen. Your cardio vascular system gets programmed to use oxygen more efficiently this way.

RESISTANCE LEVEL



Programming Preset Programs

1. Select the desired program button then press the **Enter** key.
2. The message window will ask you to enter your **Age**. You may adjust the age setting, using the Up and Down keys, then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your **Weight**. You may adjust the weight number using the Up and Down keys, then press enter to continue.
4. Next is **Time**. You may adjust the Time and press enter to continue.
5. Now you are asked to adjust the **Max Level.** This is the peak exertion level you will experience during the program (at the top of the hill). Adjust the level and then press enter.
6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Stop key to go back one level, or screen.
7. If you want to increase or decrease the workload at any time during the program press the Up or Down key. This will change the workload settings of the entire profile, although the profile picture on the screen will not change. The reason for this is so that you can see the entire profile at all times. If the profile picture is changed it will look distorted and not a true representation of the actual profile. When you make a change to the workload, the message window will show the current column, and program maximum, levels of work.
8. During the program you will be able to scroll through the data in the message window by pressing the **Display** key next to the message window.
9. When the program ends the message window will show a summary of your workout. The summary will be displayed for a short time then the console will return to the start-up display.

Custom User Defined Programs

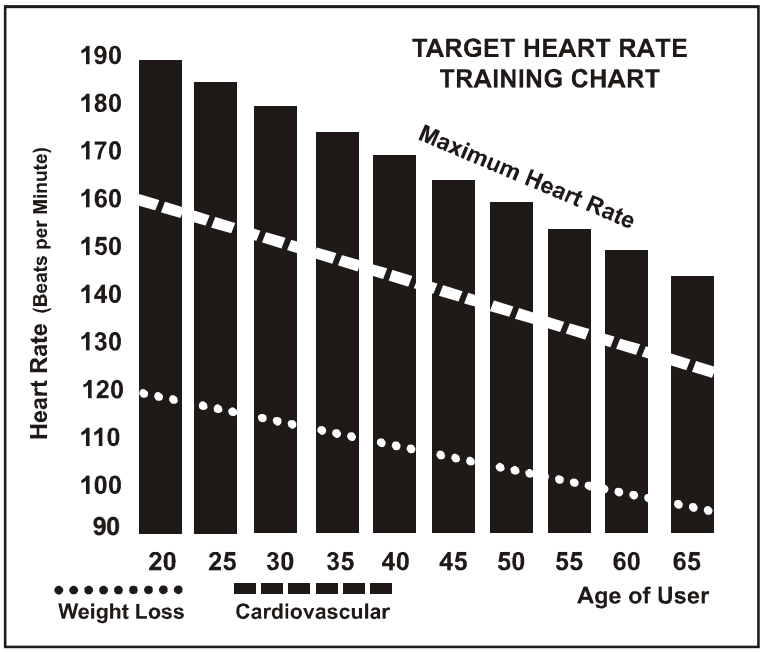
The Custom Program allows you to build and save a custom program. You can build your own custom program by following the instructions below or you can save any other preset program you complete as a custom program. The Custom Program allows you to further personalize it by adding your facility name.

1. Press the **Custom** key. The **Message Window** will show a welcome message; if you had previously saved a program the message will contain the name you gave it. Then press the **Enter** key to begin programming.
2. When you press **Enter**, the **Message Window** will show "Name – A", if there is no name saved. If the name "Custom Workout" had been previously saved the **Message Window** will show "Name – Custom Workout" and the C in Custom will be blinking. If there is a name saved you can change it or you may press the Stop key to keep the name and continue to the next step. If you want to enter a name use the **Up** and/or the **Down** key to change the first letter then press **Enter** to save the first letter and continue to the next letter. When you have finished entering the name press the **Stop** key to save the name and continue to the next step.
3. The **Message Window** will ask you to enter your **Age**. You may enter your **Age**, using the **Up** and **Down** keys or the numeric key pad, then press the **Enter** key to accept the new number and proceed on to the next screen.
4. You are now asked to enter your **Weight**. You may adjust the **Weight** number using the **Up** and **Down** keys or the numeric key pad then press enter to continue.
5. Next is **Time**. You may adjust the **Time** and press **Enter** to continue.
6. Now you are asked to adjust the **Max Level and Max Stride.** This is the peak exertion level you will experience during the program. Adjust the level and then press **Enter**.
7. Now the first column will be blinking and you are asked to adjust the level for the first segment of the workout. When you finish adjusting the first segment, or if you don't want to change, then press **Enter** to continue to the next segment.
8. The next segment will show the same level as the previously adjusted segment. Repeat the same process as the last segment then press **Enter**. Continue this process until all twenty segments have been set.
9. The **Message Window** will then tell you to press **Enter** to save the program. After saving the program the **Message Window** says "New program saved" then will give you the option to start or modify the program. Pressing **Stop** will exit to the start up screen.
10. If you want to increase or decrease the workload at any time during the program press the **Up** or **Down** key. This will only affect the workload for the present position in the profile. When the profile changes to the next column it will return to the preset work level.
11. During the User 1 or User 2 program you will be able to scroll through the data in the **Message Window** by pressing the adjacent **Display** key, switch between the profile display and a quarter mile track by pressing the **Display** key adjacent to the matrix, use the heart rate monitoring features and can switch to heart rate Auto-Pilot mode. See Heart Rate section for details of this feature).

Heart Rate Programs

Before we get started, a word about Heart Rate:
The old motto, “no pain, no gain”, is a myth that has been overpowered by the benefits of exercising comfortably. A great deal of this success has been promoted by the use of heart rate monitors. With the proper use of a heart rate monitor, many people find that their usual choice of exercise intensity was either too high or too low and exercise is much more enjoyable by maintaining their heart rate in the desired benefit range.

To determine the benefit range in which you wish to train, you must first determine your Maximum Heart Rate. This can be accomplished by using the following formula: 220 minus your age. This will give you the Maximum heart rate (MHR) for someone of your age. To determine the effective heart rate range for specific goals you simply calculate a percentage your MHR. Your Heart rate training zone is 50% to 90% of your maximum heart rate. 60% of your MHR is the zone that burns fat while 80% is for strengthening the cardio vascular system. This 60% to 80% is the zone to stay in for maximum benefit.



For someone who is 40 years old their target heart rate zone is calculated:

220 – 40 = 180 (maximum heart rate)
180 x .6 = 108 beats per minute (60% of maximum)
180 X .8 = 144 beats per minute (80% of maximum)

So for a 40 year old the training zone would be 108 to 144 beats per minute.

If you enter your age during programming the console will perform this calculation automatically. Entering your age is used for the Heart Rate control programs. After calculating your Maximum Heart Rate you can decide upon which goal you would like to pursue.

The two most popular reasons for, or goals, of exercise are cardiovascular fitness (training for the heart and lungs) and weight control. The black columns on the chart above represent the Maximum Heart Rate for a person whose age is listed at the bottom of each column. The training heart rate, for either cardiovascular fitness or weight loss, is represented by two different lines that cut diagonally through the chart. A definition of the lines’ goal is in the bottom left-hand corner of the chart. If your goal is cardiovascular fitness or if it is weight loss, it can be achieved by training at 80% or 60%, respectively, of your Maximum Heart Rate on a schedule approved by your physician. Consult your physician before participating in any exercise program.

With all Heart Rate Control elliptical you may use the heart rate monitor feature without using the Heart Rate Control program. This function can be used during manual mode or during any of the nine different programs. The Heart Rate Control program automatically controls resistance at the pedals.

Rate Of Perceived Exertion

Heart rate is important but listening to your body also has a lot of advantages. There are more variables involved in how hard you should workout than just heart rate. Your stress level, physical health, emotional health, temperature, humidity, the time of day, the last time you ate and what you ate, all contribute to the intensity at which you should workout. If you listen to your body, it will tell you all of these things.

The rate of perceived exertion (RPE), also know as the Borg scale, was developed by Swedish physiologist G.A.V. Borg. This scale rates exercise intensity from 6 to 20 depending upon how you feel or the perception of your effort.

The scale is as follows:

Rating Perception of Effort

6 Minimal

7 Very, very light

8 Very, very light +

9 Very light

10 Very light +

11 Fairly light

12 Comfortable

13 Somewhat hard

14 Somewhat hard +

15 Hard

16 Hard +

17 Very hard

18 Very hard +

19 Very,very hard

20 Maximal

You can get an approximate heart rate level for each rating by simply adding a zero to each rating. For example a rating of 12 will result in an approximate heart rate of 120 beats per minute. Your RPE will vary depending up the factors discussed earlier. That is the major benefit of this type of training. If your body is strong and rested, you will feel strong and your pace will feel easier. When your body is in this condition, you are able to train harder and the RPE will support this. If you are feeling tired and sluggish, it is because your body needs a break. In this condition, your pace will feel harder. Again, this will show up in your RPE and you will train at the proper level for that day.

Using A Heart Rate Transmitter (OPTIONAL)

How to wear your wireless chest strap transmitter:

1. Attach the transmitter to the elastic strap using the locking parts.
2. Adjust the strap as tightly as possible as long as the strap is not too tight to remain comfortable.
3. Position the transmitter with the logo centered in the middle of your body facing away from your chest (some people must position the transmitter slightly left of center). Attach the final end of the elastic strap by inserting the round end and, using the locking parts, secure the transmitter and strap around your chest.
4. Position the transmitter immediately below the pectoral muscles.
5. Sweat is the best conductor to measure very minute heart beat electrical signals. However, plain water can also be used to pre-wet the electrodes (2 ribbed oval areas on the reverse side of the belt and both sides of the transmitter). It's also recommended that you wear the transmitter strap a few minutes before your work out. Some users, because of body chemistry, have a more difficult time in achieving a strong, steady signal at the beginning. After "warming up", this problem lessens. As noted, wearing clothing over the transmitter/strap doesn't affect performance.
6. Your workout must be within range - distance between transmitter/receiver – to achieve a strong steady signal. The length of range may vary somewhat but generally stay close enough to the console to maintain good, strong, reliable readings. Wearing the transmitter immediately against bare skin assures you of proper operation. If you wish, you may wear the transmitter over a shirt. To do so, moisten the areas of the shirt that the electrodes will rest upon.

Note: The transmitter is automatically activated when it detects activity from the user's heart. Additionally, it automatically deactivates when it does not receive any activity. Although the transmitter is water resistant, moisture can have the effect of creating false signals, so you should take precautions to completely dry the transmitter after use to prolong battery life (estimated transmitter battery life is 2500 hours). The replacement battery is Panasonic CR2032.

ERRATIC OPERATION

Caution! Do not use this elliptical for Heart Rate Control unless a steady, solid Actual Heart Rate value is being displayed. High, wild, random numbers being displayed indicate a problem.
Areas to look for interference which may cause erratic heart rate:

1. Microwave ovens, TV's, small appliances, etc.
2. Fluorescent lights.
3. Some household security systems.
4. Perimeter fence for a pet.
5. Some people have problems with the transmitter picking up a signal from their skin. If you have problems try wearing the transmitter upside down. Normally the transmitter will be oriented so the logo is right side up.
6. The antenna that picks up your heart rate is very sensitive. If there is an outside noise source, turning the whole machine 90 degrees may de-tune the interference.
7. Another Individual wearing a transmitter within 3' of your machine's console.

If you continue to experience problems contact your dealer.

Heart Rate Control (HRC 1、2) Program operation

To start the **HRC** program follow the instructions below or just press the HRC key then the Enter button and follow the directions in the message window.

1. Press the **HRC** key then press the **Enter** key.
2. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
4. Next is **Time**. You may adjust the Time and press enter to continue.
5. Now you are asked to adjust the **Target HR.** This is the heart rate level you will experience during the program. Adjust the target HR and then press enter.
6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
7. If you want to increase or decrease the workload at any time during the program press the Up or Down key. This will allow you to change your target heart rate at any time during the program.
8. During the HRC program you will be able to scroll through the data in the message window by pressing the adjacent **Display key.**
9. When the program ends you may press Start to begin the same program again or Stop to exit the program or you can save the program you just completed as a **custom user program** by pressing a Custom key and following the instructions in the message window.

General Maintenance

1. Wipe down all areas in the sweat path with a damp cloth after each workout.
2. If a squeak, thump, clicking or rough feeling develops the main cause is most likely one of two reasons:
   I. The hardware was not sufficiently tightened during assembly. All bolts that were installed during assembly need to be tightened as much as possible. It may be necessary to use a larger wrench than the one provided if you cannot tighten the bolts sufficiently. I cannot stress this point enough; 90% of calls to the ser- vice department for noise issues can be traced to loose hardware.
   II. The crank arm nut needs to be retightened
   III. If squeaks or other noises persist, check that the unit is properly leveled. There are 2 leveling pads on the bottom of the rear stabilizer, use a 14mm wrench (or adjustable wrench) to adjust the levelers.

ENGINEERING MODE

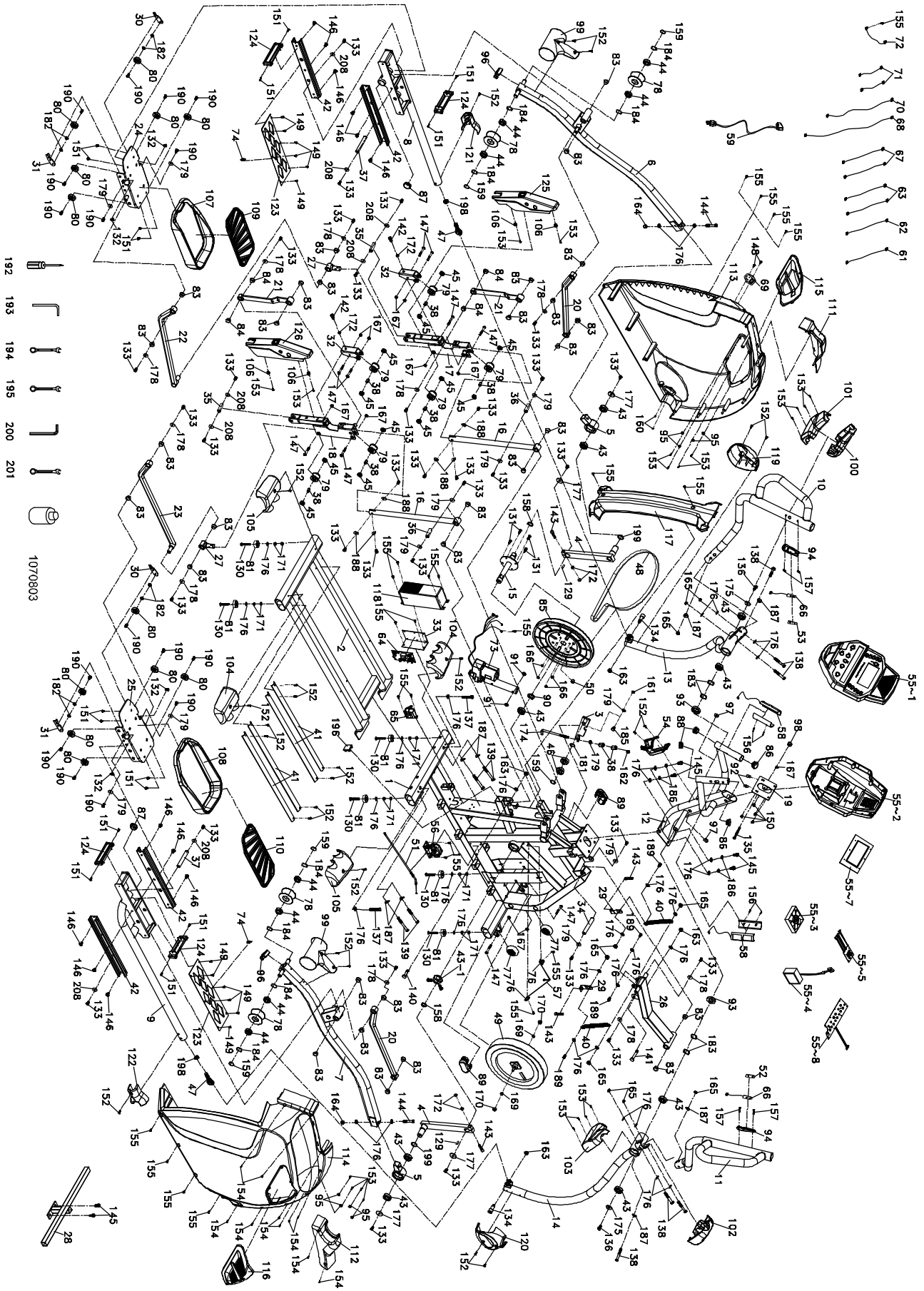
Maintenance Menu in console software:

The console has built in maintenance/diagnostic software. The software will allow you to change the console settings from English to Metric and turn off the beeping of the speaker when a key is pressed for example. To enter the Maintenance menu (may be called Engineering mode, depending on version) press and hold down the Start, Stop and Enter keys. Keep holding the keys down for about 5 seconds and the message window will display "**ENGINEERING MODE MENU PRESS ENTER**". Press the enter button to access the menu below:

a. **Key test** (will allow you to test all the keys to make sure they are functioning)
b. **Display test (**tests all the display functions)
c. **Functions** (Press enter to access settings)
   i. **Sleep mode** (Turn on to have the console power down automatically after 30 minutes of inactivity)
   ii. **Pause Mode** (Turn on allow 5 minutes of pause, turn off to have the console pause indefinitely)
   iii. **ODO reset** (reset the odometer)
   iv. **Units** (Set to English or Metric display readings)
   v. **Beep** (Turn on or off the beep when a key is pressed)
   vi. **D/A test** (tests the brake resistance)
   vii. **SAFETY**
d. **Security** (Allows you to lock the keypad so no unauthorized use is allowed)

Stride Calibration: If there is a problem with the stride, try running the calibration. Press the Start key and Level up key at the same time. Hold them down for 5 seconds and the stride calibration, press Enter and run automatically. If the problem persists, contact service department.

Exploded View Diagram



Parts List

KEY NO.	DESCRIPTION	Q'TY
1	Main Frame	1
2	Rear Rail Assembly	1
3	Idler Wheel Assembly	1
4	Crank Arm Assembly	2
5	Bushing Housing, Pedal Arm	2
6	Pedal Arm (L)	1
7	Pedal Arm (R)	1
8	Connecting Arm (L)	1
9	Connecting Arm (R)	1
10	Seat Handle Bar (L)	1
11	Swing Arm (R)	1
12	Console Mast	1
13	Lower Handle Bar (L)	1
14	Lower Handle Bar (R)	1
15	Crank Axle	1
16	Swing Assembly	2
17	Slider Adjustment (L)	1
18	Slider Adjustment (R)	1
19	Console Holder Assembly	1
20	Joint Assembly	2
21	Adjusting Lever	2
22	Left Driving Assembly	1
23	Right Driving Assembly	1
24	Left Pedal Base	1
25	Right Pedal Base	1
26	Moving Range Adjusting Assembly	1
27	connecting Component	2
28	Side Back	1
29	Fixing Piece	2
30	Adjustment Wheel Fixing Plate(L)	2
31	Adjustment Wheel Fixing Plate(R)	2
32	Wheel Base	2
33	Control Fixing Plate	1
34	Incline Rotate Axle	1
35	Ø17 × 34L_Rotate Axle A	2
36	Ø17 × 41L_Rotate Axle B	2
37	Pedal Axle	2
38	Ø11.9 × Ø8.5 × 15m/m_Rod End Sleeve	8
40	Spring	2
41	32 × 11 × 2.5T × 625m/m_Aluminum Rail	4
42	Aluminum Track	4
43	6005_Bearing	9

KEY NO.	DESCRIPTION	Q'TY
43-1	6005-2RS_Bearing	1
44	6003_Bearing	8
45	608ZZ_Bearing	12
46	6203-C3_Bearing	2
47	Rod End Bearing	2
48	Drive Belt	1
49	Flywheel	1
50	Magnet	1
51	Steel Cable(250L)	1
52	Handgrip Resistance Label (STRIDE)	1
53	Handgrip Resistance Label (LEVEL)	1
54	Drink Bottle Holder	1
55	Console Assembly	1
55~1	Console Top Cover	1
55~2	Console Bottom Cover	1
55~3	400m/m_Fan Assembly(White)	1
55~4	300m/m_W/Receiver, HR	1
55~5	Interface Board	1
55~7	Console Display Board	1
55~8	Key Board	1
56	Gear Motor	1
57	1000m/m_Sensor W/Cable	1
58	850m/m_Handpulse W/Cable Assembly	2
59	Power Cord	1
61	450m/m_Handle Wire (Upper), Resistance(White)	1
62	450m/m_Handle Wire (Upper), Incline(Red)	1
63	900m/m_Handle Wire (Lower), Resistance/Incline	2
64	Incline Controller	1
65	Incline Adaptor	1
66	Resistance Button W/Cable	2
67	1250m/m_Connecting Wire, Controller(Red)	2
68	2250m/m_Computer Cable	1
69	AC Input Module	1
70	650m/m_Computer Cable	1
71	80m/m_Connecting Wire (White)	2
72	200m/m_Ground Wire	1
73	Incline Motor	1
74	Conductive Terminal	2
76	Sensor Rack	2
77	Ø65_Transportation Wheel	2
78	Ø78_Slide Wheel , Urethane	4
79	Ø40_Adjustment Transportation Wheel	6
80	Ø38_Slide Wheel , Urethane	12
81	Ø35 × 10m/m_Rubber Foot	6

KEY NO.	DESCRIPTION	Q'TY
83	WFM-1719-12_Bushing	30
84	J4FM-1719-09_Bushing	4
85	Ø330_Drive Pulley	1
86	Ø32(1.8T)_Button Head Plug	2
87	Ø38 × 2.5T_Pedal End Cover	2
88	Ø32 × 2.0T_Round Cap	2
89	Ø40 × Ø80_Oval End Cap	2
90	Spacer Bushing	1
91	Ø24 × Ø10 × 3T_Nylon Washer (A)	2
92	5/16" × 25 × 3T_Nylon Washer	2
93	Ø45 × Ø35 × Ø26 × 10T_Isolator	2
94	Handle Switch Bracket	2
95	Speaker Grill Anchor	8
96	Oval End Cap	2
97	Switch Wire Cap	2
98	Ø13m/m_Bolt Cap	1
99	Slide Wheel Cover	2
100	Front Handle Bar Cover (L)	1
101	Rear Handle Bar Cover (L)	1
102	Front Handle Bar Cover (R)	1
103	Rear Handle Bar Cover (R)	1
104	Rear Stabilizer Cover (A)	2
105	Rear Stabilizer Cover (B)	2
106	End Cap Stopper	4
107	Pedal (L)	1
108	Pedal (R)	1
109	Pedal Foam (L)	1
110	Pedal Foam (R)	1
111	Console Mast Cover(L)	1
112	Console Mast Cover(R)	1
113	Side Case(L)	1
114	Side Case(R)	1
115	Side Case Plate(L)	1
116	Side Case Plate(R)	1
117	Side Case Rear Shroud	1
118	Circuit Cover	1
119	Connecting Arm Cover (L)(A)	1
120	Connecting Arm Cover (R)(A)	1
121	Connecting Arm Cover (L)(B)	1
122	Connecting Arm Cover (R)(B)	1
123	Frame Cover	2
124	Aluminum Axle End Cap	4
125	Left Slider Cover	1
126	Right Slider Cover	1

KEY NO.	DESCRIPTION	Q'TY
129	7 × 7 × 19L_Woodruff Key	2
130	3/8" × 2"_Flat Head Socket Bolt	6
131	1/4" × 3/4"_Hex Head Bolt	4
132	1/4" × 1/2"_Hex Head Bolt	4
133	5/16" × 1/2"_Hex Head Bolt	34
134	M10 × 1.5_Bolt	2
135	5/16" × 2-1/2"_Hex Head Bolt	1
136	3/8" × 3/4"_Hex Head Bolt	2
137	3/8" × 2-1/4"_Hex Head Bolt	2
138	3/8" × 2-1/4"_Hex Head Bolt	6
139	3/8" × 3-3/4"_Hex Head Bolt	4
140	Ø10 × 40L_Incline Set Screws	1
141	Ø10 × 62L_Incline Set Screws	1
142	M8 × 20L_Socket Head Cap Bolt	2
143	M8 × 40L_Socket Head Cap Bolt	4
144	3/8" × 2-1/4"_Socket Head Cap Bolt	2
145	3/8" × 3/4"_Socket Head Cap Bolt	6
146	5/16" × 1/2"_Button Head Socket Bolt	12
147	5/16" × 1-3/4"_Button Head Socket Bolt	10
148	M4 × 12L_Phillips Head Screw	2
149	M5 × 6L_Phillips Head Screw	12
150	M5 × 10L_Phillips Head Screw	4
151	M5 × 10L_Phillips Head Screw	16
152	M5 × 15L_Phillips Head Screw	24
153	Ø3.5 × 12L_Sheet Metal Screw	20
154	Ø4 × 15L_Sheet Metal Screw	10
155	5 × 19L_Tapping Screw	24
156	Ø3 × 20L_Tapping Screw	4
157	M5 × 20L_Flat Head Socket Screw	4
158	Ø25_C Ring	2
159	Ø17_C Ring	5
160	M4 × 5T_Nyloc Nut	2
161	M8 × 7T_Nyloc Nut	1
162	M8 × 9T_Nyloc Nut	1
163	M10 × 8T_Nyloc Nut	4
164	3/8" × 11T_Nyloc Nut	2
165	3/8" × 7T_Nyloc Nut	10
166	1/4" × 8T_Nyloc Nut	4
167	5/16" × 7T_Nyloc Nut	11
169	3/8" × UNF26 × 4T_	2
170	3/8" × UNF26 × 11T_	2
171	3/8" × 7T_Nut	12
172	M8 × 6.3T_Nut	6
174	M8 × 155L_J Bolt	1

KEY NO.	DESCRIPTION	Q'TY
175	3/8" × 30 × 2.0T_Flat Washer	2
176	3/8" × 19 × 1.5T_Flat Washer	34
177	5/16" × 35 × 1.5T_Flat Washer	4
178	Ø8.5 × 26 × 2.0T_Flat Washer	10
179	5/16" × 23 × 1.5T_Flat Washer	**12**
181	Ø17 × 23.5 × 1T_Flat Washer	1
182	Ø8 × Ø16 × 2T_Flat Washer	8
183	Ø25_Wave Washer	4
184	Ø17 × 0.5T_Wave Washer	8
185	M8 × 20L_Carriage Bolt	1
186	Ø10 × 2T_Spring Washer	4
187	3/8" × 23 × 2T_Curved Washer	8
188	5/16" × 23 × 1.5T_Curved Washer	6
189	3/8" × 19L_Hex Head Bolt	4
190	5/16" × UNC18 × 15L_Hex Head Bolt	16
192	Phillips Head Screw Driver	1
193	M8_L Allen Wrench	1
194	13/14m/m_Double Open-End Wrench	1
195	12/14m/m_Double Open-End Wrench	1
196	38 × 38L_Square End Cap	1
198	M14 × 7m/m_Luck Nut	2
199	Rubber Pad	2
200	M12_L Allen Wrench	1
201	Open End Combination Spanner Wrench	1
208	5/16" × 23 × 3T_Flat Washer	**8**