SPIRIT

CT850+ Treadmill
OWNER'S MANUAL

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

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IMPORTANT **SAFETY INSTRUCTIONS**

WARNING – Read all instructions before using this exercise equipment.

DANGER – To reduce the risk of electric shock disconnect your treadmill 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 treadmill on a flat level surface with access to a 230 Vac, 9 amp grounded outlet.

WARNING – Heart rate monitoring systems may be inaccurate. Over exercising may result in serious injury or death. If you feel faint stop exercising immediately.

DO NOT USE AN EXTENSION CORD UNLESS IT IS 2m㎡ OR BETTER, WITH ONLY ONE OUTLET ON THE END. The treadmill should be the only exercise equipment in the circuit in which it is connected. **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.

DO NOT USE AN EXTENSION CORD UNLESS IT IS A 12AWG OR BETTER, WITH ONLY ONE OUTLET ON THE END:

- Do not operate treadmill on deeply padded, plush or shag carpet. Damage to both carpet and treadmill may result.
- Keep children away from the treadmill. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the treadmill if it has a damaged cord or plug. If the treadmill 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 and then remove the plug from the outlet.
- Do not attempt to use your treadmill 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 treadmill. Quality athletic shoes are recommended to avoid leg fatigue.
- This exercise equipment can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the exercise equipment in a safe way and understand the hazards involved.
- Children shall not play with the exercise equipment.
- Cleaning and user maintenance shall not be made by children without supervision.
- Children should be supervised to ensure that they do not play with the exercise equipment.

- “WARNING! Heart rate monitoring systems may be inaccurate. Over exercising may result in serious injury or death. If you feel faint stop exercising immediately”.
- Suitable information about replacement parts that could affect the safe use of the treadmill
- The following statement: “Noise emission under load is higher than without load.“
- If applicable, the value of the A-weighted emission sound pressure level at the trainer’s ear
- Don't change any component by yourself, it maybe got injured or destroyed the treadmill.
- Below mentioned sound pressure level is measured under the condition when the trainer is operating with 5m/h or 8 km/h with no load. Sound pressure level (dB) < 70dB. Noise emission under load is higher than without load.
- Please make sure that power-supply cord and adapter placed in dry area and kept away from heat.
- **WARNING:** Injuries to health may result from incorrect or excessive training.
- 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.
- **WARNING** – The equipment shall be installed on a stable base and properly leveled.

Remove tether cord after use to prevent unauthorized treadmill operation.
SAVE THESE INSTRUCTIONS - THINK SAFETY!

The user should mount the treadmill and stand on the step rails before starting the treadmill operation. Start the belt speed at a low setting and carefully step on the belt while holding the handrails until you get used to the speed. The hand rails are used for initial stability and not for continuous use.

IMPORTANT **ELECTRICAL INSTRUCTIONS**

WARNING!

Route the power cord away from any moving part of the treadmill including the elevation mechanism and transport wheels.

NEVER remove any cover without first disconnecting AC power. If voltage varies by ten percent (10%) or more, the performance of your treadmill 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.

Do not attempt any servicing or adjustments other than those described in this manual. All else must be left to trained service personnel familiar with electro-mechanical equipment and authorized under the laws of the country in question to carry out maintenance and repair work.

NEVER expose this treadmill to rain or moisture. This product is **NOT** designed for use outdoors, near a pool or spa, or in any other high humidity environment.

Circuit breakers: Avoid AFCI/GFCI circuit breakers if possible. These breakers may trip occasionally during exercise because of the high inrush currents of the treadmill drive electronics and motor. This is an issue that affects all treadmill brands.

New laws in your area may require these breakers. If you do have these breakers and outlets in your home, and are experiencing nuisance tripping, you should check if there are any other devices plugged into the same circuit. Some examples of devices that may also cause tripping are fluorescent lights with electronic ballasts, coffee maker, space heater, hair drier. Optimally the treadmill should be the only device plugged into the circuit.

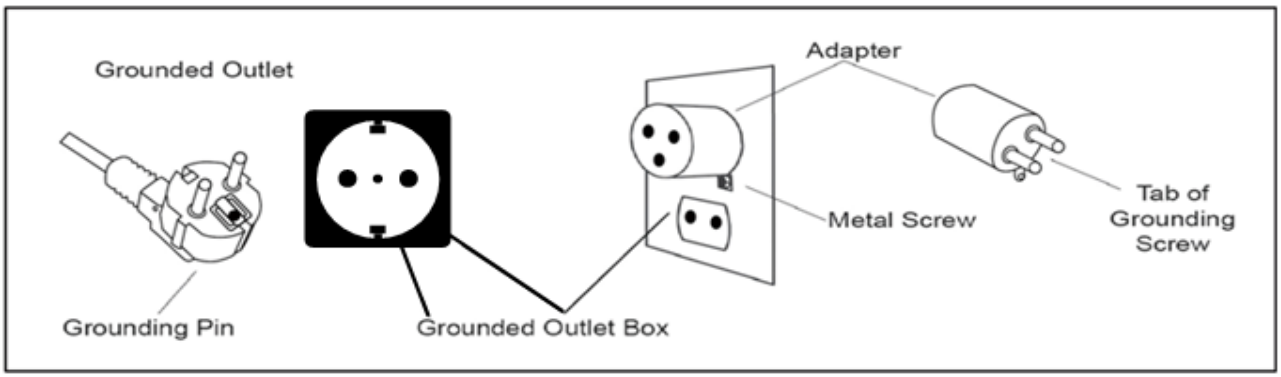
Our treadmills have surge suppressors built in to help avoid nuisance tripping. We have tested several AFCI/GFCI breakers and outlets with our products. Brands we have tested are: Eaton (Cutler Hammer Series), Leviton (Smart lock pro) and Schneider Electric (Canadian home series). These breakers do not trip in our testing, when connected to our treadmills, as long as no other devices are plugged into the same circuit.

Grounding Instructions

This product must be grounded. If the treadmill's electrical system 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 230-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**

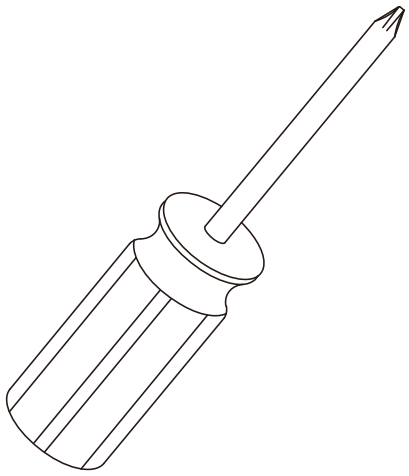
- **NEVER** operate this treadmill without reading and completely understanding the results of any operational change you request from the computer.
- Understand that changes in speed and incline do not occur immediately. Set your desired speed on the computer console and release the adjustment key. The computer will obey the command gradually.
- **NEVER** use your treadmill during an electrical storm. Surges may occur in your household power supply that could damage treadmill components.
- Use caution while participating in other activities while walking on your treadmill; such as watching television, reading, etc. These distractions may cause you to lose balance or stray from walking in the center of the belt; which may result in serious injury.
- **NEVER** mount or dismount the treadmill while the belt is moving. treadmills start with at a very low speed and it is unnecessary to straddle the belt during start up. Simply standing on the belt during slow acceleration is proper after you have learned to operate the unit.
- Always hold on to a handrail or hand bar while making control changes (incline, speed, 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.

ASSEMBLY PACK CHECKLIST

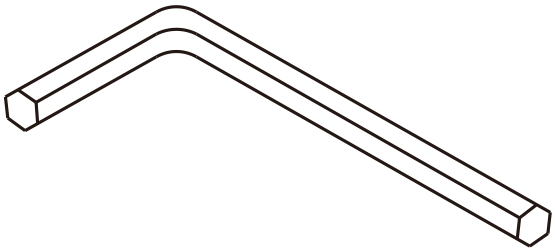
UNPACKING

1. Cut the straps, then along the dotted line on the bottom of the box; lift the box over the unit and unpack.
2. 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.

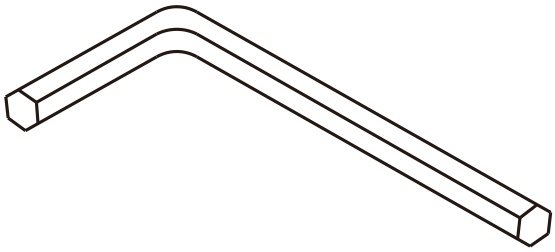
ASSEMBLY TOOLS



#158. Phillips Head Screw driver (1 pc)

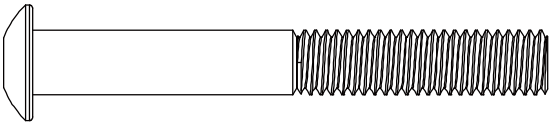


#159. 5mm L Allen Wrench (1 pc)

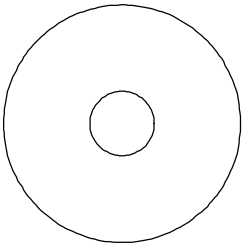


#160. 6mm L Allen Wrench (1 pc)

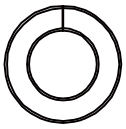
STEP 1



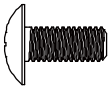
#150 - 3/8" × 3"
Button Head Socket Bolt
(10pcs)



#115 - Ø3/8" × 35 × 2.0T
Flat Washer (10pcs)

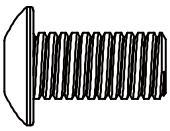


#133 - Ø10 × 2T
Split Washer (10pcs)

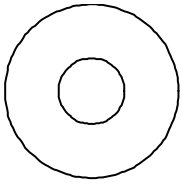


#144 - M5 × 12m/m
Phillips Head Screw
(4pcs)

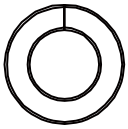
STEP 2



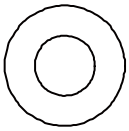
#151 - 3/8" × 3/4"
Button Head Socket Bolt
(6pcs)



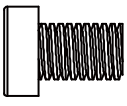
#125 - Ø3/8" × Ø25 × 2.0T
Flat Washer (6pcs)



#133 - Ø10 × 2T
Split Washer (6pcs)

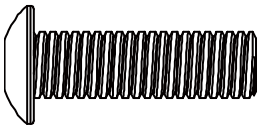


#153 - Ø8 × Ø16 × 2T
Flat Washer (6pcs)

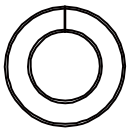


#152 -M8 × 12m/m
Socket Head Cap Bolt
(6pcs)

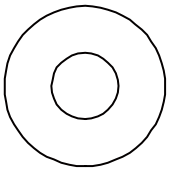
STEP 3



#154 - 3/8" ×1-1/4"
Button Head Socket Bolt
(2pcs)

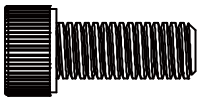


#133 - Ø10 × 2T
Split Washer (2pcs)

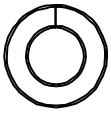


#155 - Ø10 × Ø23 × 1.5T
Curved Washer (2pcs)

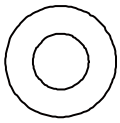
STEP 4



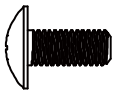
#156 - M8 × 20L
Socket Head Cap Bolt
(4pcs)



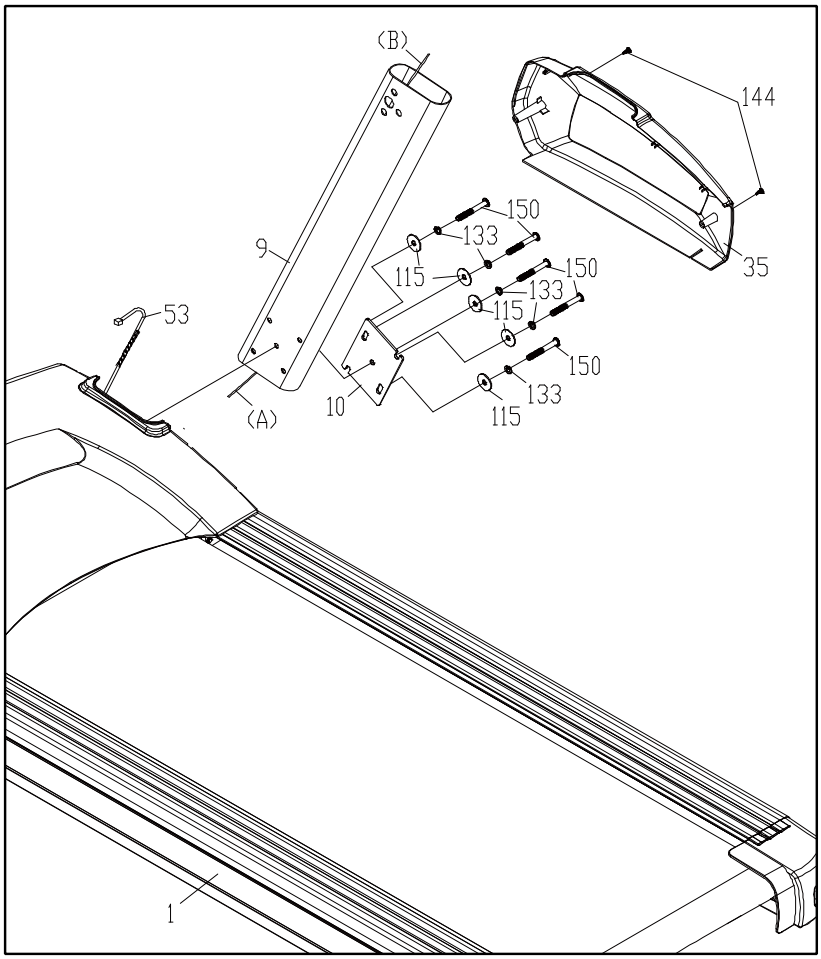
#120 - Ø8 × 1.5T
Split Washer (4pcs)



#153 - Ø8 × Ø16 × 2T
Flat Washer (4pcs)

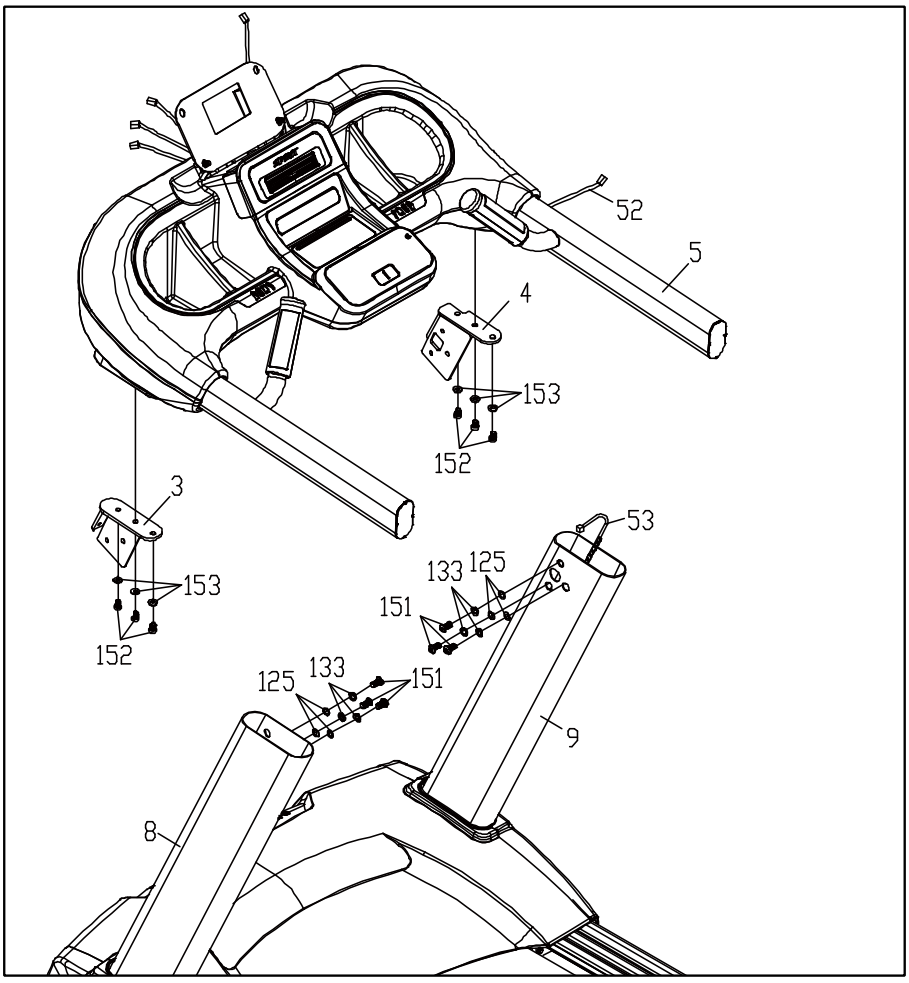


#144 - M5 × 12m/m
Phillips Head Screw
(2pcs)



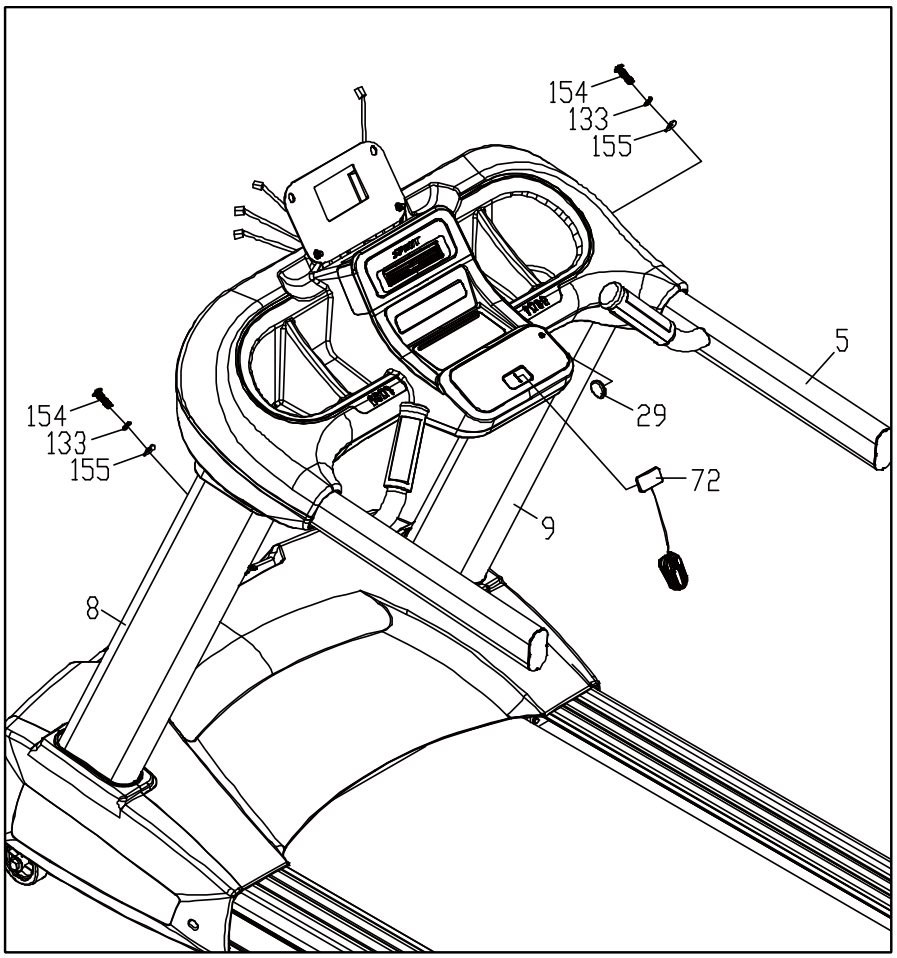
STEP 1

1. Gather Hardware for Step 1.
2. Thread the Computer Cable (No.53) up through the center of the Right Upright Column (No.9).
3. Use four sets of Button Head Socket Bolt (No.150), Split Washer (No.133) against a Flat Washer (No.115) to secure the Upright Fixing Plate (No.10) to the Right Uprights (No.9) to the Main Frame (No.1) using the Allen Wrench (No.160).
4. Use two Phillips Head Screws (No.144) to secure the Motor Base Cap Right (No.35) to Main Frame (No.1) using the Screw Driver (No.158).
5. Repeat the previous two steps on the left side.



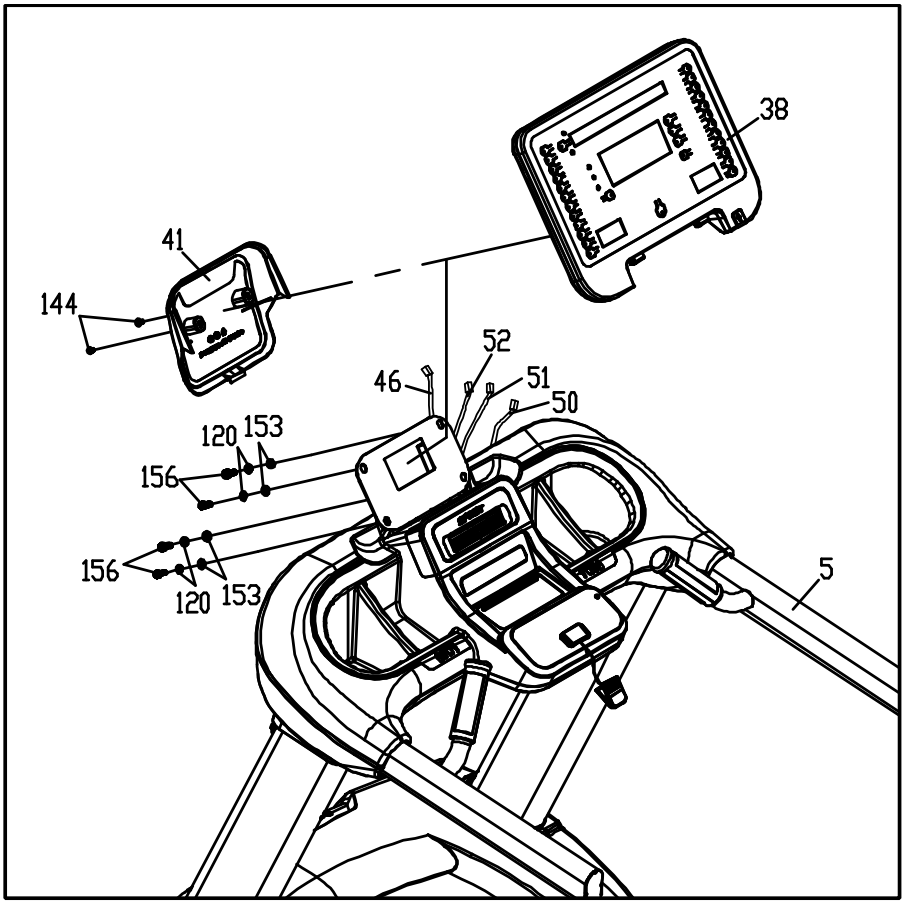
STEP 2

1. Gather Hardware for Step 2.
2. On the underside of the Console Support (No.5) is where the Locking Plate Assembly (No. 3 & 4) can be attached. Use 3 Socket Head Cap Bolts (No.152) and 3 Flat Washers (No.153) on each side to secure.
3. Connect the Computer Cable (No. 53) with the Upper Computer Cable (No.52). Be careful not to pinch the wires and slide them into the Right Upright (No.9).
4. Gently slot the Console Support (No.5) into the Left/Right Uprights (No.8 & 9) and secure with 3 Button Head Socket Bolts (No.151), 3 Split Washers (No.133), and 3 Flat Washers (No.125) on both sides using the Allen Wrench (No.160).



STEP 3

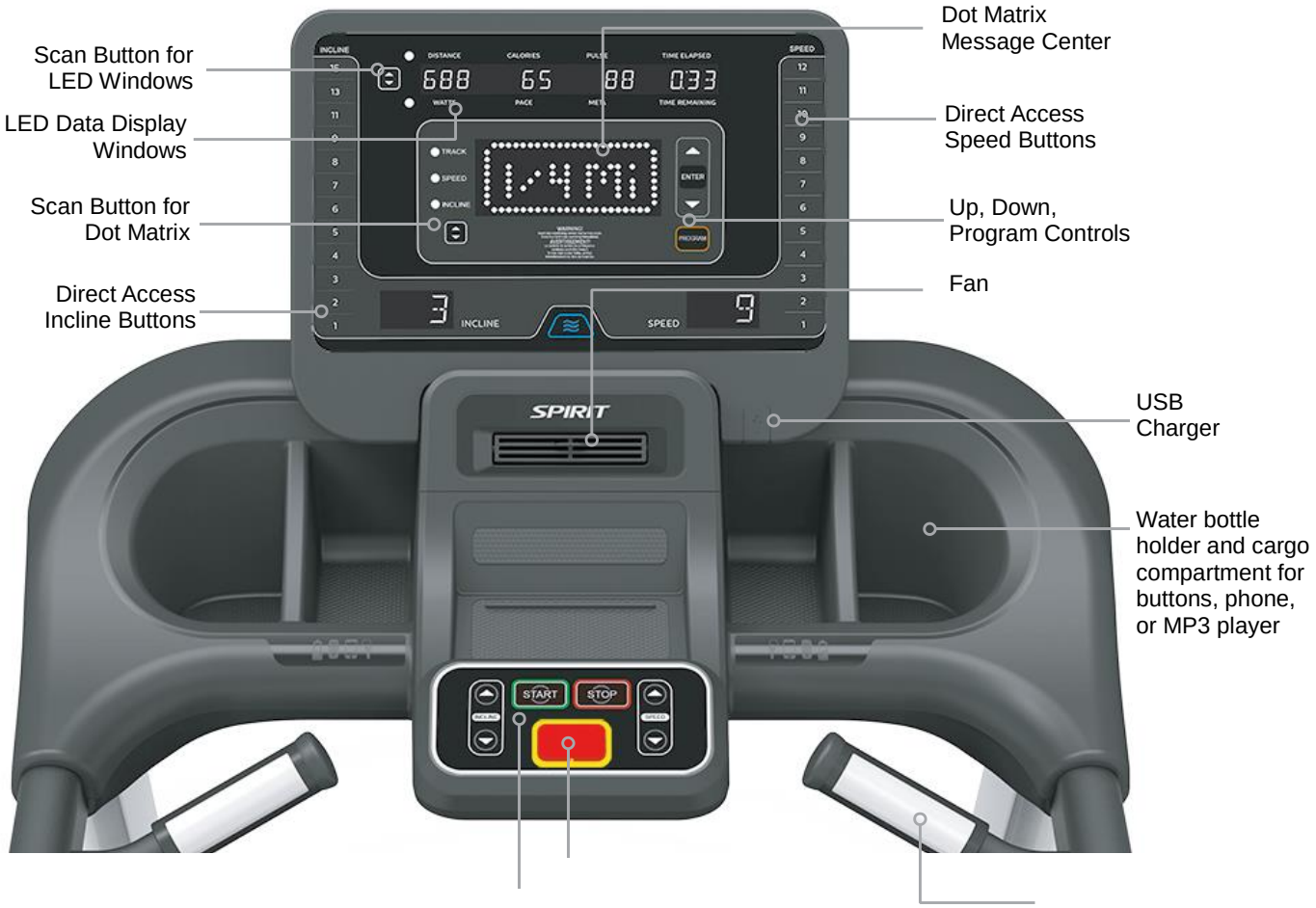
1. Gather Hardware For Step 3.
2. Further secure the uprights by inserting a Button Head Socket Bolt (No.154) through a Split Washer (No.133), and a Curved Washer (No.155) onto the backside of both Left/Right Uprights (No. 8 & 9) using the Allen Wrench (No.160).
3. Plug the Round Cap (No.29) into the Right Upright (No.9).
4. Plug the Safety Key (No.72) into the Safety Key base on the Console Support (No.5).



STEP 4

1. Gather Hardware for Step 4.
2. Place the Console Assembly (No.38) onto the Console Support (No.5). Secure with 4 Socket Head Cap Bolts (No.156), 4 Split Washer (No.120), and 4 Flat Washers (No.153) using the Allen Wrench (No.159).
3. Connect the Upper Handpulse Wires (No.50 & 51) and Upper Computer Cable (No.52) to Console Assembly (No.38).
4. Fasten the Console Cover (No.41) with 1 Phillips Head Screw (No.144) to the Console Support (No.5) using the Screw Driver (No.158).

CONSOLE OPERATION



POWER

Power the treadmill on by plugging it into an appropriate wall outlet, then turn on the power switch located at the front of the treadmill below the motor hood. Ensure that the safety button is installed, as the treadmill will not power on without it.

When the power is turned on, all the lights on the display will light for a short time. Then the Time and Distance windows will display odometer readings for a short time. The Time window will show how many hours the treadmill has been in use and the Distance window will show how many miles (or Kilometers if the treadmill is set to metric readings; see maintenance for changing settings) the treadmill has gone. A message will be displayed showing the current software version. The treadmill will then enter idle mode, which is the starting point for operation.

SAFETY TETHER CORD

A safety tether cord is provided with this unit. It is a simple magnetic design that should be used at all times. It is for your safety should you fall or move too far back on the tread-belt. Pulling this safety tether cord will stop tread-belt movement. To Use:

1. Place the magnet into position on the round metal portion of the console control head. Your treadmill will not start and operate without this. Removing the magnet also secures the treadmill from unauthorized use.

2. Fasten the plastic clip onto your clothing securely to assure good holding power. Note: The magnet has strong enough power to minimize accidental, unexpected stopping. The clip should be attached securely to make certain it does not come off. Be familiar with its function and limitations. The treadmill will stop, depending on speed, with a one to two step coast anytime the magnet is pulled off the console. Use the Stop / Pause switch in normal operation.

HOW TO CONNECT WITH THE BLUETOOTH:

1. During the Idle Mode, press the “Scan” button in to pairing mode.
2. Please be noted that the default setting is for the App connection. If the user wants to change the setting for paring with the Bluetooth chest strap, please follow the below instruction to change the default setting.
   A. During the Idle Mode, press the “Scan” button into pairing mode.
   B. When the message window show “APP”, press one of Incline▲/▼, Speed▲/▼ or Enter▲/▼ cycle through to the BLECHESTSTRAP function then press enter back to the Idle mode.
   C. Then the user could connect the Bluetooth Chest Strap right away.

CONSOLE OPERATION

QUICK START

- Press and release any button to wake display up if not already on.
- Press and release the Start button to begin belt movement at 0.3mph/ 0.5 kph, then adjust to the desired speed using the Up/Down Speed buttons. You may also use the Direct Access Speed Buttons 1 through 15 to set to a specific speed directly.
- To slow the treadmill belt press and hold the Speed Down button (console or hand rail) to the desired speed. You may also press the Direct Access Speed Buttons, 1 through 15.
- To stop the treadmill belt press and release the red Stop button.

PAUSE/STOP/RESET

- When the treadmill is running the pause feature may be utilized by pressing the red Stop button once. This will slowly decelerate the treadmill belt to a stop. The incline will go to zero percent. The Time, Distance and Calorie readings will hold while the unit is in the pause mode. After 5 minutes the display will reset and return to the start up screen.
- To resume your exercise when in Pause mode, press the Start button. The speed and incline will return to their previous settings.
- Pressing the Stop button twice will end the program and a workout summary will be displayed. If the Stop button is pressed a third time, the console will return to the idle mode (start up) screen.
- If the Stop button is held down for more than 3 seconds the console will reset.
- When you are setting data, such as age and time, for a program pressing the Stop button will allow you to go back one step for each button press.

INCLINE

- Incline may be adjusted anytime after the belt starts moving.
- Press and hold the adjust Incline Up/Down buttons to achieve desired level of effort. You may also choose a more rapid increase / decrease by selecting a rapid incline button, 1 through 15, on left hand side of console (incline).
- The display will indicate incline numbers as percent of grade (the same as grade of a road) as adjustments are made.

DOT MATRIX CENTER DISPLAY

Ten rows of dots indicate each level of a workout in manual mode. Displays messages that help guide you through the programming process. During a program the message window displays your workout data. The dots are only to show an approximate level (speed/incline) of effort. They do not necessarily indicate a specific value - only an approximate percent to compare levels of intensity. In Manual Operation the Speed / Incline Dot Matrix Message Center will build a profile “picture” as values are changed during a workout. There are twenty-four columns, indicating time. The 24 columns are divided into 1/24th of the total time of the program. When the time is counting up from zero (as in quick start) each column represents 1 minute.

Next to the Dot Matrix Message Center are three LED lights labeled: Track, Speed and Incline, along with a Up/Down Scan button. When the Track LED is lit the Dot Matrix Message Center displays the Track profile, when the Speed LED is lit the Dot Matrix Message Center displays the Speed profile and when the Incline LED is lit it displays the Incline profile. You may change the profile view by pressing the Up/Down Scan button. After scrolling through the three profiles the Dot Matrix Message Center will automatically scroll through the three displays showing each one for four seconds. The LED associated with each profile will blink while that view is displayed. One more press of the Up/Down Scan button will return you to the Track profile.

0.4 KM (1/4 MILE) TRACK

The 1/4-mile track (0.4 km) and lap counter are located to the left of the dot matrix window. The flashing dot indicates your progress. In the center of the track there is a lap counter for reference.

HEART RATE FEATURE

The Pulse (Heart Rate) window will display your current heart rate in beats per minute during the workout. You must use both left and right stainless steel sensors to pick up your pulse. Pulse values are displayed anytime the computer is receiving a Grip Pulse signal. You may use the Grip Pulse feature while in Heart Rate Control. The CT850 will also pick up wireless heart rate transmitters that are Polar compatible, including coded transmissions.

PROGRAMMABLE FEATURES

TO SELECT AND START A PRESET PROGRAM

The treadmill offers twelve preset programs, Hill, Fat Burn, Cardio, Interval, HIIT (High Intensity Interval Training), 5k Run, 10k Run, a Custom User defined program, two heart rate control programs, a Fitness Test (Gerkin, Army, Navy, Airforce, Marine Corps, Coast Guard, PEB), and one Manual program.

1. Press the Program button to select a program, then press the Enter button to begin customizing the program with your personal data, or just press the Start button to begin the program with the default settings.
2. After selecting a program and pressing Enter to set your personal data, the Time window will blink with the default value of 20 minutes. You may use any of the Up/Down buttons to adjust the time. After adjusting the time, press Enter. (Note: You may press Start at any time during the programming to begin with only settings you have modified at that point).
3. The Incline window will now be blinking a value indicating your Age. Use the Up/Down buttons to adjust, and then press enter.

4. The Distance window will now be blinking a value indicating your Bodyweight. Entering your correct bodyweight affects the Kcal readout accuracy. Use the Up/Down buttons to adjust, and then press Enter.
5. The Speed window will now be blinking, showing the preset top speed of the selected program. Use the Up/Down buttons to adjust, and then press Enter. Each program has various speed changes throughout; this allows you to limit the highest speed the program will attain during your workout.
6. Now press the Start button to begin your workout, or the Stop button to return to the previous screen.
7. There will be a 3 minute warm-up to begin. You can press the Start button to bypass this and go straight to the workout. During the warm-up the clock will count down from 3 minutes. (5k Run, 10k Run, HR 1& 2, Custom, and Manual do not have warm-up)

PRESET PROGRAMS SPEED/INCLINE SETTINGS

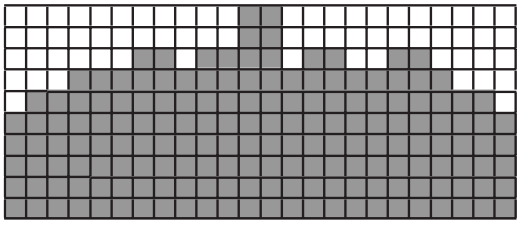
The preset program Speed and Incline levels are shown in the chart below. The Speed numbers shown in the chart indicate a percentage of the top speed of the program. For instance, the first Speed setting for P1 (Program 1, HILL) shows the number 20. This means that this segment of the program will have a speed that is 20% of the top speed for the program (The user sets the top speed in the procedure above). If the user sets the top speed to 10 mph / 16 kph, then the first segment will be 2 mph / 3.2 kph. You will notice that segment 12 shows 100 which means, the speed will be set to 100% of 10 mph / 16 kph or simply 10 mph/ 16 kph.

P1= HILL; P2= FAT BURN; P3= CARDIO; P4= INTERVAL

Prog	SEG	Warm up			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Cool down		
P1	Speed	20	30	40	50	60	60	70	70	70	80	80	70	80	80	100	100	70	80	80	70	70	80	80	70	60	60	50	40	30	20
	Incline	0	0	0	0	1	2	3	3	4	3	3	4	4	5	3	3	4	3	3	4	4	5	4	3	1	1	0	0	0	0
P2	Speed	20	30	40	50	60	60	70	80	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	80	70	60	50	40	30	20
	Incline	0	0	0	0	1	2	3	3	3	4	5	3	3	4	4	3	3	2	2	3	4	5	6	4	2	1	0	0	0	0
P3	Speed	20	30	40	50	60	60	70	70	70	80	70	70	80	80	60	70	80	80	70	70	70	100	70	80	60	60	50	40	30	20
	Incline	0	0	0	0	1	1	1	2	2	3	2	2	3	3	1	2	3	3	2	2	4	4	2	3	1	1	0	0	0	0
P4	Speed	20	30	40	50	60	60	70	80	100	60	60	70	80	100	60	70	100	60	70	100	60	70	80	70	60	60	50	40	30	20
	Incline	0	0	0	0	1	2	3	5	6	2	3	5	6	7	2	3	7	2	3	8	2	3	5	4	3	1	0	0	0	0

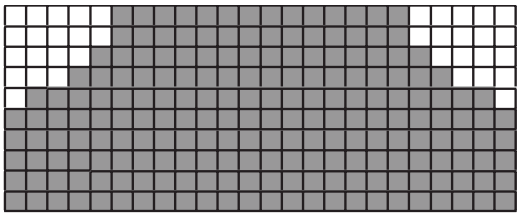
HILL

This program follows a triangle or pyramid type of gradual progression from approximately 10% of maximum effort (the level that you chose before starting this program) up to a maximum effort which lasts for 10% of the total workout time, then a gradual regression of resistance back to approximately 10% of maximum effort.



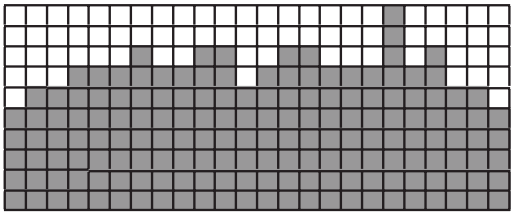
FATBURN

This program follows a quick progression up to the maximum resistance level (default or user input level) that is sustained for 2/3 of the workout. This program will challenge your ability to sustain your energy output for an extended period of time.



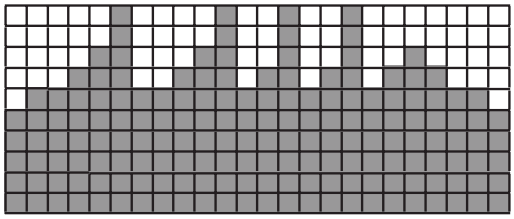
Cardio

This program presents a quick progression up to near maximum resistance level (default or user input level). It has slight fluctuations up and down to allow your heart rate to elevate, and then recover repeatedly, before beginning a quick cool down. This will build up your heart muscle and increase blood flow and lung capacity.

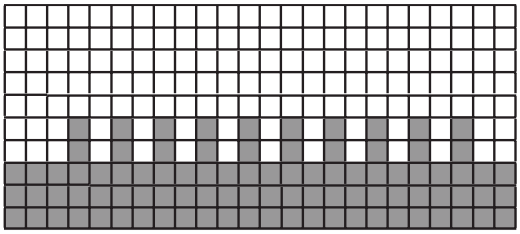


Interval

This program takes you through high levels of intensity followed by recovery periods of low intensity. This program utilizes and develops your “Fast Twitch” muscle fibers which are used when performing tasks that are intense and short in duration. These deplete your oxygen level and spike your heart rate, followed by periods of recovery and heart rate drop to replenish oxygen. Your cardiovascular system gets programmed to use oxygen more efficiently.



HIIT



The HIIT, or High Intensity Interval Training, program takes advantage of the latest trend in fitness. During the program you will perform short bursts of high intensity sprinting followed by short rest periods. HIIT is a fully customizable interval training program. You can enter the number of intervals, time of each interval Sprint and Rest periods and the work intensity of the levels.

1. Using the Program button select the HIIT program then press Enter. The Dot Matrix Message Center will ask you to enter your Age. You may enter your Age, using the Up and Down keys, then press the Enter key to accept the new number and proceed on to the next screen.
2. 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.
3. Next you are asked for the number of intervals you want to do. The default is 10 and the range available is 3 to 15. One interval equals 1 Sprint and 1 Rest segment.
4. Next you will enter the Interval time. The Dot Matrix Message Center shows: Sprint Time: 30 and Rest Time: 30. The Sprint time will be blinking. You may use the Up/ Down keys to adjust the Sprint time from 30 to 60 seconds then press Enter. The time for the Rest period will blink and you can adjust the time using the Up/Down keys and press Enter.
5. The Dot Matrix Message Center now displays SPRINT SPD 6.0 MPH/ 10KPH. Use the Up/Down buttons to adjust the sprint speed you desire and press Enter.
6. The Dot Matrix Message Center now displays REST SPEED 3.0 MPH/ 5KPH. Use the Up/Down buttons to adjust the res speed you desire and press Enter.
7. You may now press Start to begin the HIIT program. The program starts with a 3-minute warm-up period with the speed set to 50% of the sprint speed selected previously. You can manually adjust the speed during warm-up if you wish.

CUSTOM PROGRAM

1. Select the Custom program using the Program button then press Enter. Note that the Dot Matrix Message Center will light a single row of dots at the bottom (Unless there is a previously saved program).
2. The clock (Time) window will be flashing. Use the Up/Down buttons to set the program for the desired time. Press the Enter button. This is a must to continue even if the time is not adjusted.
3. The Incline window will now be blinking a value indicating your Age. Use the Up/Down buttons to adjust and then press Enter.
4. The Distance window will now be blinking a value indicating your Bodyweight. Entering your correct bodyweight affects the Calorie readout accuracy. Use the Up/Down buttons to adjust, and then press Enter.
5. The first speed setting column (segment) will now be blinking. Using the Up/Down buttons, adjust the speed to your desired effort level for the first segment then press Enter. The second column will now be blinking. Note that the previous segment value has been carried over to the new segment. Repeat the above process until all segments have been programmed.
6. The first column will be blinking again. The console is now ready for the incline settings. Repeat the same process used to set the speed values for programming the segments for incline.
7. Press the Start button to begin the workout and also save the program to memory.

5K RUN

This program automatically sets a 5k or 10k (5 or 10 kilometer) distance as your goal. The track display will show one loop that is the equivalent of 5 or 10 kilometers and the Distance window will also show 5k or 10k to start. When the program begins the Distance will count down; once it reaches zero the program ends.

**Please note that the Speed readout is in MPH if the console is not set to Metric.*

FITNESS TEST

When the Fit-Test button is pressed the dot matrix displays the 5 different tests available: Gerkin, Army, Navy, Air Force, Marines, PEB, Coast Guard. To select your desired fitness test use the arrow button and press enter.

FITNESS TEST OPERATION

1. The Dot Matrix Message Window will ask you to enter your Weight. You may adjust the weight setting, shown in the Distance window, using the Up and Down buttons then press the Enter button to accept the new number and proceed on to the next screen.
2. You are now asked to enter your Age. You may adjust the age setting, shown in the Incline window, using the Up and Down buttons then press Enter to continue.
3. You are now asked to enter your Gender. You may adjust the gender setting, shown in the Incline window, using the Up and Down buttons then press Enter to continue.
4. Now press Start to begin the test.

GERKIN TEST

The Gerkin protocol, also known as the fireman's protocol, is a sub-max Vo2 (volume of oxygen) test. The test will increase speed and elevation alternately until you reach 85% of your Max heart rate. The time it takes for you to reach 85% determines the test score (VO2max) as shown in the chart below.

Stage	Time	Speed	Grade	VO2 Max
1	0 to 1:00	7.2KPH	0%	31.15
2.1	1:00	7.2KPH	2%	32.55
2.2	1:30	7.2KPH	2%	33.6
2.3	1:45	7.2KPH	2%	34.65
2.4	2:00	8.0KPH	2%	35.35
3.1	2:15	8.0KPH	2%	37.45
3.2	2:30	8.0KPH	2%	39.55
3.3	2:45	8.0KPH	2%	41.3
3.4	3:00	8.0KPH	4%	43.4
4.1	3:15	8.0KPH	4%	44.1
4.2	3:30	8.0KPH	4%	45.15
4.3	3:45	8.0KPH	4%	46.2
4.4	4:00	8.8KPH	4%	46.5
5.1	4:15	8.8KPH	4%	48.6
5.2	4:30	8.8KPH	4%	50
5.3	4:45	8.8KPH	4%	51.4
5.4	5:00	8.8KPH	6%	52.8
6.1	5:15	8.8KPH	6%	53.9
6.2	5:30	8.8KPH	6%	54.9
6.3	5:45	8.8KPH	6%	56
6.4	6:00	9.6KPH	6%	57
7.1	6:15	9.6KPH	6%	57.7
7.2	6:30	9.6KPH	6%	58.8
7.3	6:45	9.6KPH	6%	60.2
7.4	7:00	9.6KPH	8%	61.2
8.1	7:15	9.6KPH	8%	62.3
8.2	7:30	9.6KPH	8%	63.3
8.3	7:45	9.6KPH	8%	64
8.4	8:00	10.4KPH	8%	65
9.1	8:15	10.4KPH	8%	66.5
9.2	8:30	10.4KPH	8%	68.2
9.3	8:45	10.4KPH	8%	69
9.4	9:00	10.4KPH	10%	70.7
10.1	9:15	10.4KPH	10%	72.1
10.2	9:30	10.4KPH	10%	73.1
10.3	9:45	10.4KPH	10%	73.8
10.4	10:00	11.2KPH	10%	74.9
11.1	10:15	11.2KPH	10%	76.3
11.2	10:30	11.2KPH	10%	77.7
11.3	10:45	11.2KPH	10%	79.1
11.4	11:00	11.2KPH	10%	80

Stage	Time	Speed	Grade	VO2 Max
1	0 to 1:00	4.5MPH	0%	31.15
2.1	1:00	4.5MPH	2%	32.55
2.2	1:30	4.5MPH	2%	33.6
2.3	1:45	4.5MPH	2%	34.65
2.4	2:00	5.0MPH	2%	35.35
3.1	2:15	5.0MPH	2%	37.45
3.2	2:30	5.0MPH	2%	39.55
3.3	2:45	5.0MPH	2%	41.3
3.4	3:00	5.0MPH	4%	43.4
4.1	3:15	5.0MPH	4%	44.1
4.2	3:30	5.0MPH	4%	45.15
4.3	3:45	5.0MPH	4%	46.2
4.4	4:00	5.5MPH	4%	46.5
5.1	4:15	5.5MPH	4%	48.6
5.2	4:30	5.5MPH	4%	50
5.3	4:45	5.5MPH	4%	51.4
5.4	5:00	5.5MPH	6%	52.8
6.1	5:15	5.5MPH	6%	53.9
6.2	5:30	5.5MPH	6%	54.9
6.3	5:45	5.5MPH	6%	56
6.4	6:00	6.0MPH	6%	57
7.1	6:15	6.0MPH	6%	57.7
7.2	6:30	6.0MPH	6%	58.8
7.3	6:45	6.0MPH	6%	60.2
7.4	7:00	6.0MPH	8%	61.2
8.1	7:15	6.0MPH	8%	62.3
8.2	7:30	6.0MPH	8%	63.3
8.3	7:45	6.0MPH	8%	64
8.4	8:00	6.5MPH	8%	65
9.1	8:15	6.5MPH	8%	66.5
9.2	8:30	6.5MPH	8%	68.2
9.3	8:45	6.5MPH	8%	69
9.4	9:00	6.5MPH	10%	70.7
10.1	9:15	6.5MPH	10%	72.1
10.2	9:30	6.5MPH	10%	73.1
10.3	9:45	6.5MPH	10%	73.8
10.4	10:00	7.0MPH	10%	74.9
11.1	10:15	7.0MPH	10%	76.3
11.2	10:30	7.0MPH	10%	77.7
11.3	10:45	7.0MPH	10%	79.1
11.4	11:00	7.0MPH	10%	80

ARMY

A timed 2 mile / 3.2 kph run. You control the speed manually.
Maximum time allowed to pass the test.

Age	Male	Female
17-21	16:36	19:42
22-26	17:30	20:36
27-31	17:54	21:42
32-36	18:48	23:06
37-41	19:30	24:06

For more detailed information, visit: http://bit.ly/SF-Army

AIR FORCE

A timed 1.5 mile / 2.4kph run. You control the speed manually.
Maximum time allowed to pass the test:

Age	Male	Female
<30	13:36	16:22
30-39	14:00	16:57
40-49	14:52	18:14
50-59	16:22	19:43
60+	18:14	22:28

For more detailed information, visit: http://bit.ly/SF-AirForce

NAVY

A timed 1.5 mile/ 2.4 kph run. You control the speed manually.
Maximum time allowed to pass the test:

Age	Male	Female
17-21	16:36	19:42
22-26	17:30	20:36
27-31	17:54	21:42
32-36	18:48	23:06
37-41	19:30	24:06

Age	Male	Female
45-49	16:09	17:02
50-54	16:46	17:27
55-59	17:10	18:35
60-64	18:53	19:44
65+	20:36	20:53

For more detailed information, visit: http://bit.ly/SF-Navy

MARINES

A timed 3 mile/ 4.8 kph run. You control the speed manually.
Maximum time allowed to pass the test:

Age	Male	Female
17-26	28:00	31:00
27-39	29:00	32:00
40-45	30:00	33:00
46+	33:00	36:00

For more detailed information, visit: http://bit.ly/SF-Marines

PEB

A timed 1.5 mile/ 2.4kph run. You control the speed manually.
Maximum time allowed to pass the test:

Age	Male	Female
20-24	10:43	13:36
25-29	11:05	13:43
30-34	11:26	13:43
35-39	11:47	14:37
40-44	12:28	15:12

Age	Male	Female
45-49	13:07	16:02
50-54	13:49	17:02
55-59	14:48	17:37
60+	15:07	17:37

For more information visit: http://bit.ly/SF-Peb

COAST GUARD

A timed 1.5 mile/ 2.4kph run. You control the speed manually.
Maximum time allowed to pass the test:

Age	Male	Female
<30	12:52	15:27
30-39	13:37	15:58
40-49	14:30	16:59
50-59	15:27	17:56
60+	16:41	18:46

For more information visit: http://bit.ly/SF-CoastGuard

Before The Test:

- Make sure you are in good health; check with your physician before performing any exercise if you are over the age of 35 or persons with pre-existing health conditions.
- Make sure you have warmed up and stretched before taking the test.
- Do not take in caffeine before the test.
- Hold the hand grips gently, do not tense up.

During the Test:

- The console must be receiving a steady heart rate for the test to begin. You may use the hand pulse sensors or wear a heart rate chest strap transmitter.
- The test will start with a 3 minute warm-up at 3 MPH/ 5KPH before the actual test begins.
- The data shown during the test is:
  a. Time indicates total elapsed time
  b. Incline in percent grade
  c. Distance in Miles or Kilometers depending on preset parameter.
  d. Speed in MPH or KPH depending on preset parameter.
  e. Target Heart Rate and Actual Heart Rate are shown in the Dot Matrix Message Center.

After the Test

- Cool down for about one to three minutes.
- Take note of your score because the console will automatically return to the start-up mode after a few minutes.

WHAT YOUR SCORE MEANS

VO2max Chart for males and very fit females

	18-25 years old	26-35 years old	36-45 years old	46-55 years old	56-65 years old	65+ years old
excellent	>60	>56	>51	>45	>41	>37
good	52-60	49-56	43-51	39-45	36-41	33-37
above average	47-51	43-48	39-42	35-38	32-35	29-32
average	42-46	40-42	35-38	32-35	30-31	26-28
below average	37-41	35-39	31-34	29-31	26-29	22-25
poor	30-36	30-34	26-30	25-28	22-25	20-21
very poor	<30	<30	<26	<25	<22	<20

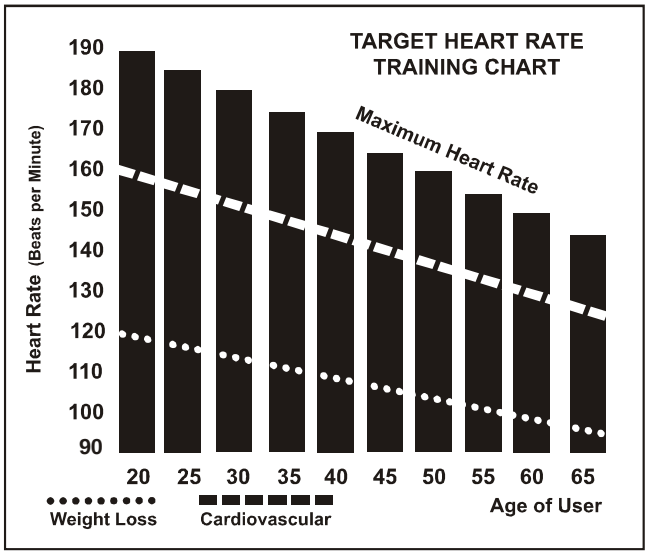
VO2max Chart for females and de-conditioned males

	18-25 years old	26-35 years old	36-45 years old	46-55 years old	56-65 years old	65+ years old
excellent	56	52	45	40	37	32
good	47-56	45-52	38-45	34-40	32-37	28-32
above average	42-46	39-44	34-37	31-33	28-31	25-27
average	38-41	35-38	31-33	28-30	25-27	22-24
below average	33-37	31-34	27-30	25-27	22-24	19-22
poor	28-32	26-30	22-26	20-24	18-21	17-18
very poor	<28	<26	<22	<20	<18	<17

HEART RATE PROGRAMS

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 choice of exercise intensity is 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. 65% of your MHR is the zone that burns fat while 85% is for strengthening the cardio vascular system. This 65% to 85% 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 .65 = 117 beats per minute (65% of maximum)
180 x .85 = 153 beats per minute (85% of maximum)

So for a 40 year old the training zone would be 117 to 153 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 85% or 65%, respectively, of your Maximum Heart Rate on a schedule approved by your physician. Consult your physician before participating in any exercise program.

CAUTION!

The target value used in HR programs is a suggestion only for normal, healthy individuals. Do not exceed your limits! You may not be able to obtain your chosen target. If in question, enter a higher age value that will set a lower target goal.

HEART RATE CONTROL

Heart Rate Control (HRC) uses your treadmill's incline system to control your heart rate. Increases and decreases in elevation affect heart rate much more efficiently than changes in speed alone. The HRC program automatically changes elevation gradually to achieve the programmed target heart rate.

Selecting a Heart Rate Control Program:

You have the option, during the setup mode, to choose either the Weight Control (HR-1) program or the Cardiovascular (HR-2) program. The Weight Control program will attempt to maintain your heart rate at 60% of your Maximum Heart Rate. The Cardiovascular program will attempt to maintain your heart rate at 85% of your Maximum Heart Rate. Your Maximum Heart Rate is based upon a formula that subtracts your age from a constant of 220. Your HR setting is automatically calculated during the setup mode when you enter your age.

HEART RATE CONTROL PROGRAMMING

1. You must receive a strong / steady value in heart rate window or the program will not start. Dot Matrix Message Center will show "Check Pulse" if there is no pulse signal.
2. Use the Program button to select the HR program to begin.
3. The Dot Matrix Message Center will show "Press Enter to modify or Start to begin workout". You can either press the Enter button for settings or press the Start button to execute the default program.
4. When Enter is pressed, the Dot Matrix Message Center will read, "Press 1 or 2 to select then press Enter". At the same time, the Dot Matrix Message Center will show "1".
5. The Dot Matrix Message Center will show "Adjust Time then press Enter" with the Time window blinking. Use the Up/Down & Fast/Slow buttons to adjust. After setting a time, press Enter.
6. The Dot Matrix Message Center will prompt you to enter Age. Press Enter once adjusted.
7. The Dot Matrix Message Center will prompt you to enter Body Weight. Press Enter once adjusted.
8. The Dot Matrix Message Center will prompt you to enter Heart Rate. Press Enter once adjusted.
9. Press Start to begin your workout or Enter to modify. Press Stop to return to the previous screen.

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 treadmill for Heart Rate programs 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. Electric 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.
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.

GENERAL MAINTENANCE

MAINTENANCE OF RUNNING BELT/DECK:

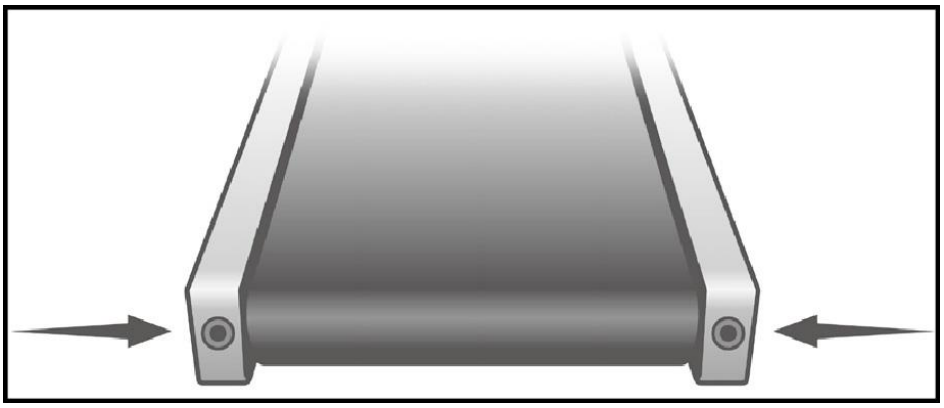
Your treadmill uses a very high-efficient and proprietary belt/deck combination. Performance is maximized when the deck is kept as clean as possible. Use a soft, damp cloth, or paper towel, wipe the edge of the belt and the area between the belt edge and the frame. Also reach as far as practical directly under the belt edge. This should be done once a month to extend belt and deck life. A mild soap and water solution along with a nylon scrub brush will clean the top of the textured belt. Allow to dry before using. The low maintenance (routine monthly cleaning), dual sided deck is designed to withstand up to 4,000 hrs on each side. If the original side of the deck use is over 4000 hrs, then it needs to be flipped. Contact your service technician for assistance. Do not apply any type of lubricant or wax to the surface.

Belt Dust - This occurs during normal break-in or until the belt stabilizes. Wiping excess off with a damp cloth will minimize buildup.

General Cleaning - Dirt, dust, and pet hair can block air inlets and accumulate on the running belt. On a monthly basis: vacuum underneath your treadmill to prevent buildup. Once a year, you should remove the black motor hood and vacuum out dirt that may accumulate. UNPLUG POWER CORD BEFORE THIS TASK.

BELT ADJUSTMENTS:

Tread-belt Tension Adjustment - Adjustment must be made from the rear roller. The adjustment bolts are located at the end of the step rails in the end caps, as noted in diagram below.



Note: *Adjustment is through small hole in the end cap.*

Tighten the rear roller bolts only enough to prevent slippage at the front roller. Turn both tread-belt tension adjustment bolts in increments of 1/4 turn each and inspect for proper tension by walking on the belt at a low speed, making sure the belt does not slip. Keep tensioning the bolts until the belt stops slipping.

- **If you feel the belt is tight enough, but it still slips, the problem may be a loose Motor drive belt under the front cover.**

DO NOT OVERTIGHTEN – Over tightening will cause belt damage and premature bearing failure.

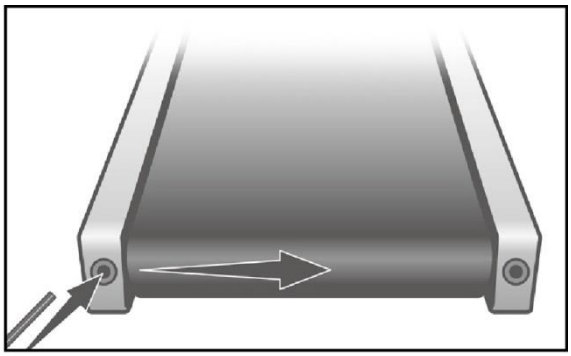
TREADBELT TRACKING ADJUSTMENT:

The performance of your treadmill is dependent on the frame running on a reasonably level surface. If the frame is not level, the front and back roller cannot run parallel, and constant belt adjustment may be necessary.

The treadmill is designed to keep the tread-belt reasonably centered while in use. It is normal for some belts to drift near one side while the belt is running with no one on it. After a few minutes of use, the tread-belt should have a tendency to center itself. If, during use, the belt continues to move toward one side, adjustments are necessary.

TO SET TREADBELT TRACKING:

A 8 mm Allen wrench is provided to adjust the rear roller. Make tracking adjustments from the **left** side only. Set belt speed at approximately 3 to 5 kph.



Remember, a small adjustment can make a dramatic difference!

Turn the bolt clockwise to move the belt to the right. Turn the bolt only a 1/4 turn and wait a few minutes for the belt to adjust itself. Continue to make 1/4 rotation turns until the belt stabilizes in the center of the running deck.

The belt may require periodic tracking adjustment depending on use and walking/running characteristics. Some users will affect tracking differently. Expect to make adjustments as required to center the tread-belt. Adjustments will become less of a maintenance concern as the belt is used. Proper belt tracking is an owner responsibility common with all treadmills.

ATTENTION:
DAMAGE TO THE RUNNING BELT RESULTING FROM IMPROPER TRACKING / TENSION ADJUSTMENTS IS NOT COVERED UNDER THE WARRANTY.

CALIBRATION PROCEDURE

1. Remove the safety key.
2. Press and hold down the Start and Speed Up buttons and replace the safety button. Continue to hold the Start and
   Speed Up button until the window displays “Factory settings”, then press the Enter button.
3. You will now be able to set the display to show Metric or Imperial settings (Meters vs. Miles). To do this, press the Up or Down button to show which you want, then press Enter.
4. Make sure the wheel size diameter is 2.98 then press Enter.
5. Adjust the minimum speed (if needed) to 0.5 and then press Enter.
6. Adjust the maximum speed (if needed) to 12.0 and then press Enter.
7. Adjust the maximum elevation (if needed) to 15 and then press Enter.
8. Press Start to begin calibration. The process is automatic; the speed will start up without warning, so do not stand on the belt.

GENERAL MAINTENANCE

1. After each workout, wipe down all areas exposed to sweat with a damp cloth.
2. Ensure all bolts are properly tightened after assembly and before each use.
3. Ensure that the unit is properly leveled after assembly and before each use. Use leveling pads on the bottom of the feet to adjust height.

ENGINEERING MODE MENU

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 button is pressed for example. To enter the Engineering Mode Menu press and hold down the Start, Stop and Enter buttons, then insert the safety button. Keep holding the buttons down for about 5 seconds until the Message Center displays Engineering Mode Menu. Press the Enter button to access the menu below:

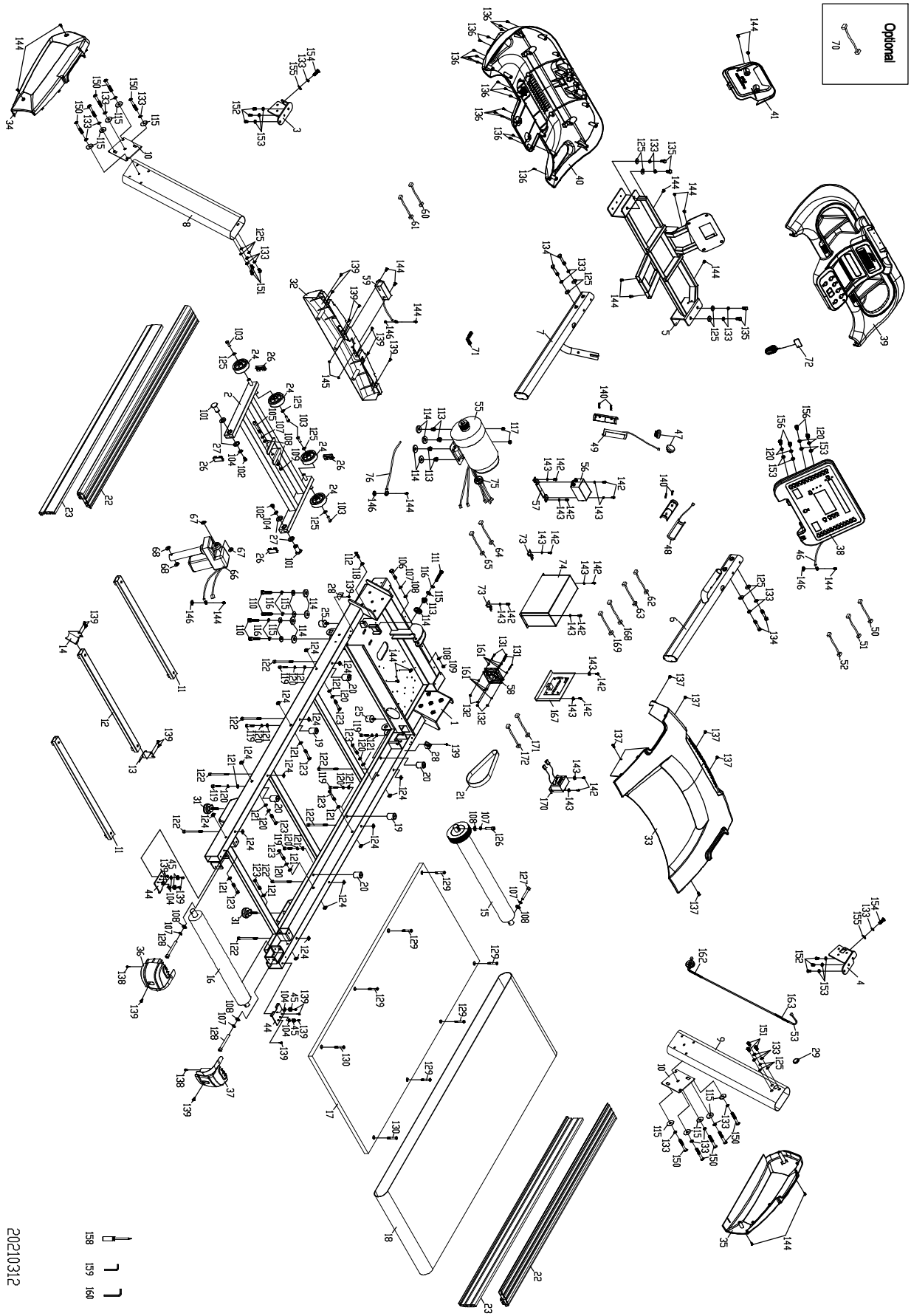
1. Key Test (Will allow you to test all the buttons to make sure they are functioning).
2. Display Test (Tests all the display functions).
3. Security (Allows the keypad to be locked to prevent unauthorized use).
4. Functions (Press Enter to access settings and Up arrow to scroll).
    a. Sleep Mode -Turn on to have the console power down automatically after 30 minutes of inactivity.
    b. Pause Mode -Turn on allow 5 minutes of pause, turn off to have the console pause indefinitely.
    c. Maintenance - Reset maintenance reminder message and odometer readings.
    d. Units -Sets the display to readout in in Imperial (miles, pounds, feet, etc.) or Metric (kilometers, kilograms, meters, etc.) display measurements.
    e. GS Mode - Returns the elevation to lowest setting when pause is pressed.
    f. Beep Mode- Turns the speaker (beep sound) on or off.
5. Security - Sets the Child Lock function. This function locks out the keypad until a pre-determined key sequence is pressed. Key sequence = Incline UP held down together until unlocked.

TROUBLESHOOTING

Before contacting your dealer for aid, please review the following information. It may save you both time and expense. This list includes common problems that may not be covered under the treadmill's warranty.

PROBLEM	SOLUTION/CAUSE
Display does not light	1) Tether cord not in position. 2) Circuit breaker on front grill tripped. Push circuit breaker in until it locks. 3) Plug is disconnected. Make sure plug is firmly pushed into 220-230 VAC wall outlet. 4) Breaker panel circuit breaker may be tripped. 5) Treadmill defect. Contact your dealer.
Tread-belt does not stay centered	The user may be walking while favoring or putting more weight on either the left or right foot. If this walking pattern is natural, track the belt slightly off-center to the side opposite from the belt movement.
Treadmill belt hesitates when walked/run on	See General Maintenance section on Tread-belt Tension. Adjust as necessary.
Motor is not responsive after pressing start	1) If the belt moves, but stops after a short time and the display shows "LS ", run calibration 2) If you press start and the belt never moves, then the display shows LS, contact service.
Treadmill will only achieve approximately 7 mph/ 10 kph but shows higher speed on display	This indicates motor should be receiving power to operate. Low AC voltage to treadmill. Do not use an extension cord. If an extension cord is required it should be as short as possible and heavy duty 12 gauge minimum. Low household voltage. Contact an electrician or your dealer. A minimum of 230 volt AC current is required.
Treadmill trips on board 9 amp circuit	High belt/deck friction. See General Maintenance. If cleaning doesn't prevent this from reoccurring, check the amp draw of the motor. If this is high and there are signs of significant wear of the deck, it may need to be flipped if it is on its original side.
Computer shuts off when console is touched (on a cold day) while walking/running	Treadmill may not be grounded. Static electricity is "crashing" the computer. Refer to Grounding Instructions on page 4.
House circuit breaker trips, but not the treadmill circuit breaker.	Check that the treadmill is the only appliance in the circuit. See "Important Electrical Information" in the front of this manual for more details.
Noises while in uses (squeaks, bumps, clicking, etc.)	Tighten all bolts. Check that machine is leveled. Adjust levelers if needed using a wrench.

EXPLODED VIEW **DIAGRAM**



PARTS **LIST**

No.	Description	Q'ty
1	Main Frame	1
2	Incline Bracket	1
3	Locking Plate Assembly (R)	1
4	Locking Plate Assembly (L)	1
5	Console Support	1
6	Handle Bar (R)	1
7	Handle Bar (L)	1
8	Left Upright	1
9	Right Upright	1
10	Upright Fixing Plate	2
11	Running Deck Stabilizer Assembly(A)	2
12	Running Deck Stabilizer Assembly(B)	1
13	Belt Guide(R)	1
14	Belt Guide(L)	1
15	Front Roller W/Pulley	1
16	Rear Roller	1
17	Running Deck	1
18	Running Belt	1
19	Cushion A	2
20	Cushion B	4
21	Drive Belt	1
22	Aluminum Foot Rail	2
23	Aluminum Foot Rail	2
24	Transportation Wheel	4
25	Incline Rubber Foot	2
26	Square End Cap	4
27	Stable Wheel Spacer	4
28	Motor Cover Anchor(D)	2
29	Round Cap	1
31	Foot Pad	2
32	Front Motor Cover	1
33	Motor Top Cover	1
34	Motor Base Cap (L)	1
35	Motor Base Cap (R)	1
36	Rear Adjustment Base (L)	1
37	Rear Adjustment Base (R)	1
38	Console Assembly	1
39	Rack Top Cover	1
40	Rack Bottom Cover	1
41	Console Cover	1
44	Adjustment Rail Pad	2
45	Rubber Foot Pad	4
46	300m/m_Ground Wire	1
47	Handpulse End Cap	2

No.	Description	Q'ty
48	900m/m_Handpulse W/Cable Assembly(SMP-03)	1
49	900m/m_Handpulse W/Cable Assembly(SMR-03)	1
50	400m/m_Handpulse Wire (Upper)	1
51	400m/m_Handpulse Wire (Upper)	1
52	1100m/m_Computer Cable(Upper)	1
53	2000m/m_Computer Cable	1
55	Drive Motor	1
56	Filter	1
57	Filter Plate	1
58	Fan	1
59	AC Electronic Module	1
60	450m/m_Connecting Wire (White)	1
61	450m/m_Connecting Wire (Black)	1
62	350m/m_Connecting Wire(White)	1
63	350m/m_Connecting Wire (Black)	1
64	400m/m_Motor Fan Connecting Cable(Black)	1
65	400m/m_Motor Fan Connecting Cable(White)	1
66	Incline Motor	1
67	Ø10 × Ø25 × 0.8T_Nylon Washer	2
68	Ø10 × Ø25 × 2.5T_Nylon Washer	2
70	Power Cord	1
71	TV Adapter (5C2V)	1
72	Square Safety Key	1
73	Inverter Plate	2
74	Inverter	1
75	Ø35×21×13L_Ferrite Core	1
76	300m/m_Ground Wire	1
101	Ø18 × Ø19 × 41L_Carriage Bolt	2
102	M8 × 12m/m_Hex Head Bolt	2
103	3/8" × 25m/m_Hex Head Bolt	4
104	Ø8.5 × Ø26 × 2.0T_Flat Washer	6
105	M10 × P1.5 × 65m/m_Hex Head Bolt	1
106	M10 × P1.5 × 50m/m_Hex Head Bolt	1
107	Ø10 × 1.5T_Split Washer	6
108	Ø3/8" × Ø19 × 1.5T_Flat Washer	8
109	M10 × P1.5 × 8T_Nylon Nut	2
110	3/8" × UNC16 × 2"_Socket Head Cap Bolt	4
111	3/8" × 2-1/2"_Hex Head Bolt	1
112	3/8" × UCN16 × 2"_Socket Head Cap Bolt	1
113	Ø10 × Ø14 × 14L_Bushing	5
114	Ø13 × Ø35 × 5T_Nylon Washer	9
115	Ø3/8" × 35 × 2.0T_Flat Washer	15
116	Ø10 × 2.0T_Split Washer	5
117	3/8" × 7T_Nylon Nut	2
118	Ø4 × Ø10 × 1.0T_Flat Washer	1
119	M8 × 1.25 × 40m/m_Socket Head Cap Bolt	6

No.	Description	Q'ty
120	Ø8 × 1.5T_Split Washer	14
121	Ø5/16" × 16 × 1.0T_Flat Washer	14
122	M8 × 1.25 × 95m/m_Button Head Socket Bolt	8
123	M8 × 55m/m_Hex Head Bolt	8
124	M8 × 1.25 × 6.5T_Square Nut	16
125	Ø3/8" × Ø25 × 2.0T_Flat Washer	18
126	M10 × 40m/m_Socket Head Cap Bolt	1
127	M10 × 80m/m_Socket Head Cap Bolt	1
128	M10 × 100m/m_Socket Head Cap Bolt	2
129	M8 × P1.25 × 55L_Flat Head Countersink Bolt	6
130	M8 × 35m/m_Flat Head Countersink Bolt	2
131	M3 × 50m/m_Phillips Head Screw	4
132	M3 × 5T_Nylon Nut	4
133	Ø10 × 2T_Split Washer	26
134	3/8" × 2-1/4"_Hex Head Bolt	4
135	3/8" × 3/4"_Hex Head Bolt	4
136	3.5 × 12m/m_Sheet Metal Screw	18
137	5 × 12m/m_Sheet Metal Screw	6
138	5 × 25m/m_Tapping Screw	2
139	5 × 20m/m_Tapping Screw	23
140	3 × 25m/m_Tapping Screw	4
142	M5 × 12m/m_Phillips Head Screw	12
143	Ø5 × 1.5T_Split Washer	12
144	M5 × 12m/m_Phillips Head Screw	20
145	M5 × 5T_Nylon Nut	2
146	M5_Star Washer	4
150	3/8" × 3"_Button Head Socket Bolt	10
151	3/8" × 3/4"_Button Head Socket Bolt	6
152	M8 × 12m/m_Socket Head Cap Bolt	6
153	Ø8 × Ø16 × 2T_Flat Washer	10
154	3/8" × UNC16 × 1-1/4"_Button Head Socket Bolt	2
155	Ø10 × Ø23 × 1.5T_Curved Washer	2
156	M8 × P1.25 × 20L_Socket Head Cap Bolt	4
158	Phillips Head Screw Driver	1
159	L Allen Wrench	1
160	Allen Wrench	1
161	Isolation Pad	8
162	Ending Tape(400m/m)	1
163	Ending Tape(200m/m)	1
167	Saving small plates	1
168	900m/m_Computer Cable (Upper)_6P	1
169	1800m/m_Computer Cable (Lower)_6P	1
170	Choke	1
171	100m/m_Connecting Wire (Black)	1
172	350m/m_Connecting Wire (White)	1