Owner's Manual

Model No.
16011608500

CT850 ENT

- Assembly

- Operation

- Adjustments

- Parts

- Warranty

CAUTION:
Read and
Understand this
Manual before
Operating unit

SPIRIT

Retain For Future Reference

Table of Contents

SPIRIT

CONGRATULATIONS ON YOUR NEW TREADMILL

Thank you for your purchase of this quality treadmill from Dyaco Canada Inc. Your new treadmill was manufactured by one of the leading fitness manufacturers in the world and is backed by one of the most comprehensive warranties available. Through your dealer, Dyaco Canada Inc. will do all we can to make your ownership experience as pleasant as possible for many years to come. The local dealership where you purchased this treadmill is your administrator for all warranty and service needs. Their responsibility is to provide you with the technical knowledge and service personnel to make your experience more informed and any difficulties easier to remedy.

Please take a moment at this time to record the name of the dealer, their telephone number, and the date of purchase below to make any future, needed contact easy. We appreciate your support and we will always remember that you are the reason that we are in business. Please complete and mail your registration card today and enjoy your new treadmill.

Name of Dealer_____

Telephone Number of Dealer_____

Purchase Date_____

Product Registration

RECORD YOUR SERIAL NUMBER
Please record the Serial Number of this fitness product in the space provided below.

Serial Number_____

REGISTER YOUR PURCHASE
The self-addressed product registration card must be completed in full and returned to Dyaco Canada Inc.

IMPORTANT **SAFETY INFORMATION**
READ ALL INSTRUCTIONS BEFORE USING THIS TREADMILL

CAUTION: Before starting any exercise program, it is recommended that you consult your physician.
WARNING: Connect this unit to a properly grounded outlet only.
DANGER: To reduce the risk of electric shock, always unplug the treadmill from the electrical outlet immediately after using and before cleaning.

WARNING
To reduce the risk of burns, fire, electric shock, or injury to persons:
1. Use 120 volt a.c. household current on a dedicated circuit. Grounding Instructions
   This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
2. The use of an extension cord with this product is not recommended. If an extension cord is needed, use a short (less than 10 feet) heavy gauge (14 gauge or better) extension cord with a three prong (grounded) plug and receptacle.
3. Never leave the treadmill unattended when plugged in. Unplug from the outlet when not in use and before removing or replacing parts.
4. Never operate the treadmill if it has a damaged cord or plug, if it is not working properly, if it has been dropped, damaged, or exposed to water.
5. Do not pull the treadmill by the power supply cord or use cord as a handle. Keep cord away from heated surfaces and open flames.
6. Fitness equipment must always be installed and used on a flat surface. Do not use outdoors or near water.
7. Do not insert any objects into any openings.
8. Keep children and pets away from this equipment at all times while exercising.
9. Handicapped individuals should have medical approval and close supervision when using this treadmill.
10. Do not place hands or feet under the treadmill. Always keep hands and legs off from the treadmill when others are using it.
11. Never turn on treadmill while standing on treadbelt. Always return the treadmill to slow speed to provide for safe dismount and low speed restart.
12. To disconnect, turn all controls to the off position, then remove plug from outlet.
13. Use the treadmill only for it's intended use as described in this manual. Do not use any attachments that are not recommended by the manufacturer.
14. Warm up 5 to 10 minutes before each workout and cool down 5 to 10 minutes afterward. This allows your heart rate to gradually increase and decrease and will help prevent straining muscles.
15. Never hold your breath while exercising. Breathing should remain at a normal rate in conjunction with the level of exercise being performed.
16. Start your program slowly and very gradually increase your speed and distance.
17. Always wear suitable clothing and footwear while exercising. Do not wear loose fitting clothing that could become entangled with the moving parts of your treadmill.
18. Do not walk or jog barefoot, in stocking feet or loose fitting shoes or slippers.
19. Care must be taken when lifting or moving the equipment, so as not to injure your back. Always use proper lifting techniques.
20. User weight should not exceed 450 lbs.

WARNING: Before beginning any exercise program consult your physician. This is especially important for individuals over the age of 35 or persons with pre-existing health problems. Read all instructions before using any fitness equipment. We assume no responsibility from personal injury or property damage sustained by or through the use of this product.

Important Safety Instructions

WARNING - Read all instructions before using this equipment.
DANGER - To reduce the risk of electric shock disconnect your SPIRIT 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 120-volt AC, 20-amp grounded outlet.

DO NOT USE AN EXTENSION CORD UNLESS IT IS 14 AWG OR LARGER, WITH ONLY ONE OUTLET ON THE END. The treadmill should be the only equipment in the electrical circuit. 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 operate treadmill on deeply padded, plush or shag carpet. Damage to both carpet and treadmill may result.

- Do not block the rear of the treadmill. Provide a minimum of 1 meter clearance between the rear of the treadmill and any fixed object.

- 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 mains 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, remove tether cord, 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 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.

- Use handrails provided; they are for your safety.

- 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.

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

Important Electrical Information

WARNING!

NEVER use a RCD - Residual Current Device (U.S. ver.= GFCI) - wall outlet with this treadmill. As with any appliance with a large motor, the RCD/GFCI will trip often. Route the power mains 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.

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. The temperature specification is 40 degrees c, and humidity is 95%, non-condensing (no water drops forming on surfaces).

Circuit breakers: Some circuit breakers used in homes are not rated for high inrush currents that can occur when a treadmill is first turned on or even during normal use. If your treadmill is tripping the circuit breaker (even though it is the proper current rating and the treadmill is the only appliance on the circuit) but the circuit breaker on the treadmill itself does not trip, you will need to replace the breaker with a high inrush type. This is not a warranty defect. This is a condition we as a manufacture have no ability to control. This part is available through most electrical supply stores.

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.

Figure 1.
Grounding methods
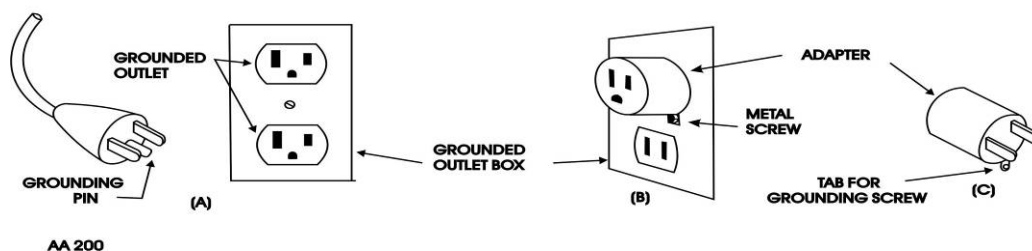
Important Operation Instructions

- **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. SPIRIT 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 SPIRIT dealer.

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 console control head. Your treadmill will not start and operate without this.

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 red Stop / Pause switch in normal operation.

Assembly Pack Check List

Step1
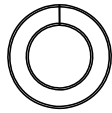
#117 - 3/8" x16.5 x2.0T x4H
Split Washer (10 pcs)
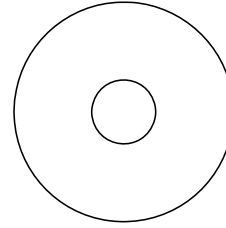
#116 - φ 3/8" x 35 x 2T
Flat Washer (10 pcs)

#144 - 3/8"-16 x 3"
Button Head Socket Bolt (10 pcs)

#134 - M5 x 12mm
Phillips Head Screw (4 pcs)

Step2
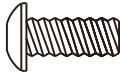
#134 - M5 x 12mm
Phillips Head Screw (4 pcs)
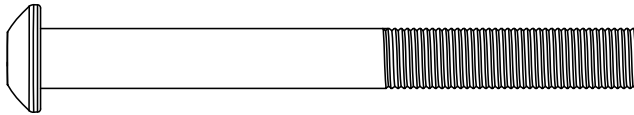
Step3

#117 - 3/8" x16.5 x2.0T x4H
Split Washer (6 pcs)

#125 - φ 3/8" x25 x2T
Flat Washer (6 pcs)

#145 – 3/8"-16 x3/4"
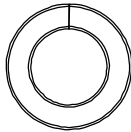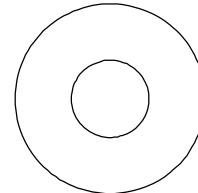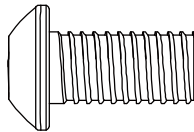Button Head Socket Bolt (6 pcs)
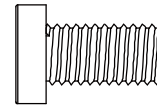
#146 – M8 x1.25x12mm
Socket Head Cap Bolt (6 pcs)

Step4
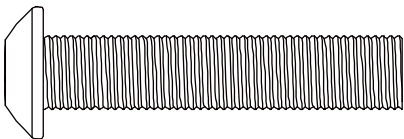
#162 - 3/8" ×1-3/4"_Button
Head Socket Bolt (2 pcs)
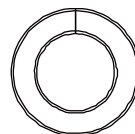
#117 -3/8" x16.5×2.0×4H
Split Washer (2 pcs)
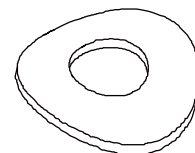
#163 - 10 × 23 × 1.5T
Curved Washer (2 pcs)

Assembly Instructions

Step 1: Uprights

1. Gather **HARDWARE FOR STEP 1**.
2. The **RIGHT UPRIGHT** (**34**) has a preinstalled **LOWER COMPUTER CABLE** (**42**), **LOWER TV SIGNAL CABLE** (**171**), **LOWER CONSOLE POWER CORD** (**173**), **LOWER NETWORK W/CABLE** (**175**), **LOWER CSAFE W/CABLE** (**177**), and **LOWER HDMI CABLE** (**181**).
   To install the uprights on the base frame, special care must be taken not to pinch the computer cable between the upright and frame base. Slide the **SPLIT WASHER** (**117**) and **FLAT WASHER** (**116**) on the **BUTTON HEAD SOCKET BOLT** (**144**). Slide the **BOLT** through the top hole in the **RETAINING PLATE** (**98**), and corresponding top hole in the upright tube, and screw into the base frame. Now install the other 4 **BUTTON HEAD SOCKET BOLTS** (**144**) together with **SPLIT WASHERS** (**117**), and **FLAT WASHERS** (**116**) and tighten all 5 bolts up.
3. Repeat this step to install the **LEFT UPRIGHT** (**33**).
4. Attach the **LEFT** and **RIGHT MOTOR BASE CAPS** (**26-L, 27-R**) with 4 **PHILLIPS HEAD SCREWS** (**134**).
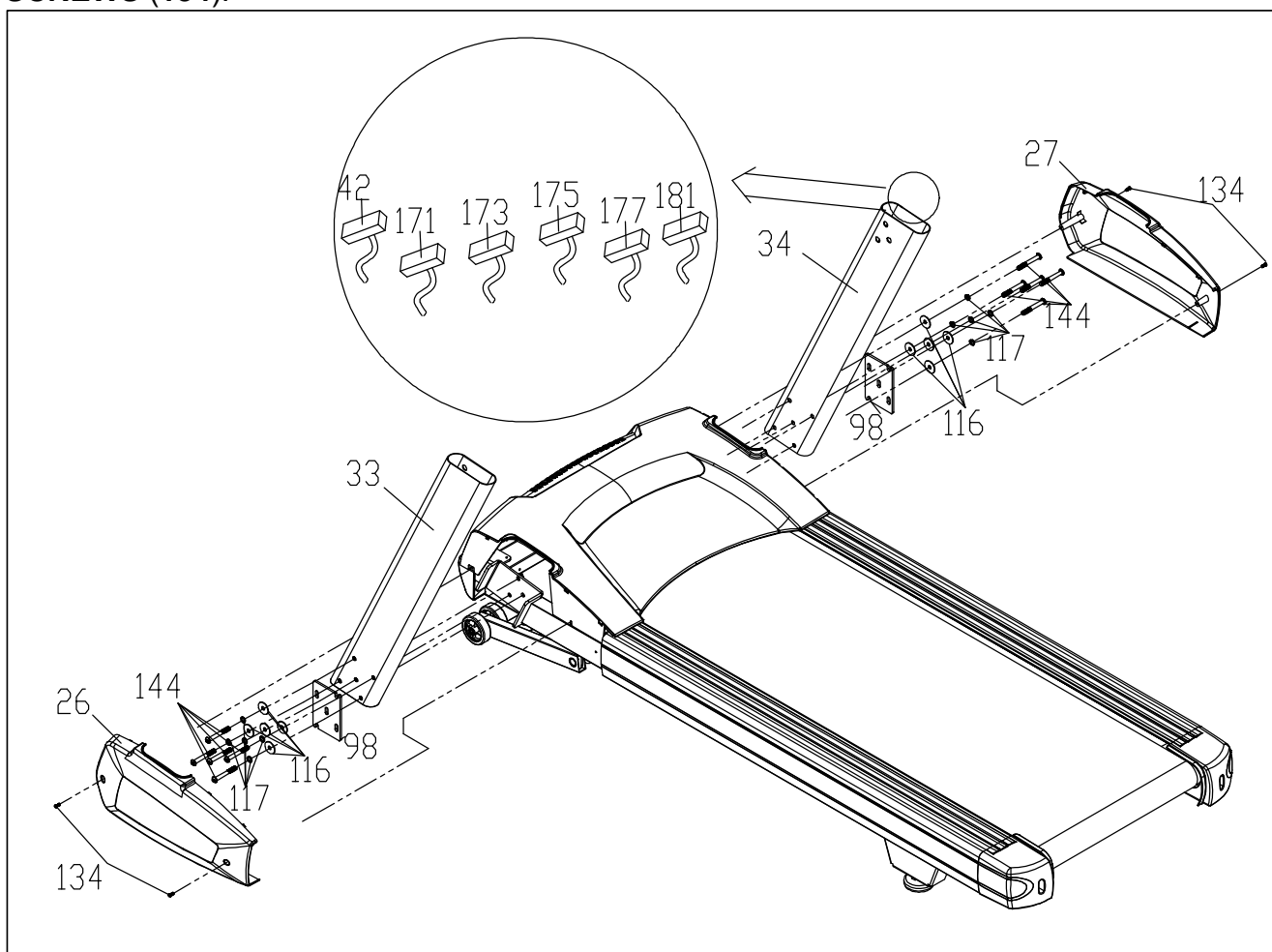
Step 2: Installing the console

1. Gather **HARDWARE FOR STEP 2.**
2. Connect the **UPPER COMPUTER CABLE** (**41**), **UPPER TV SIGNAL CABLE** (**170**), **UPPER CONSOLE POWER CORD** (**172**), **UPPER NETWORK W/CABLE** (**174**), **UPPER CSAFE W/CABLE** (**176**), **UPPER HDMI CABLE** (**180**), **HAND PULSE WIRES** (**39**) (**40**) and **GROUND WIRE** (**178**) to the **BOARD** on the back of the **CONSOLE** (**28**).
3. Use **4 PHILLIPS HEAD SCREWS** (**134**) to secure console assembly to the **CONSOLE SUPPORT** (**5**).
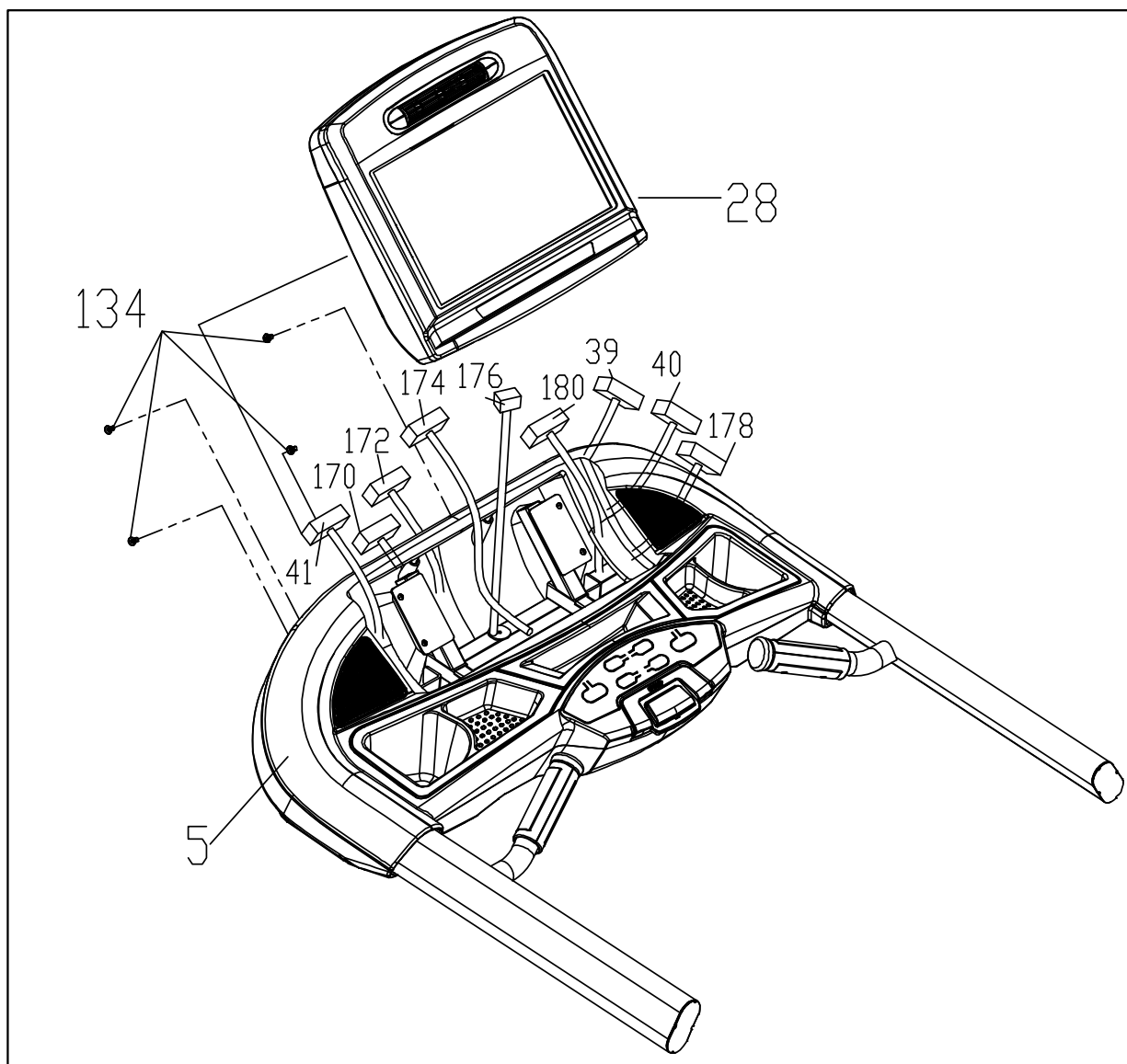
Step 3: Installing console onto uprights

1. Gather **HARDWARE FOR STEP 3**.
2. Use 6 **SOCKET HEAD CAP BOLTS** (**146**) to secure the console onto the **LEFT AND RIGHT MOUNTING BRACKETS** (**3-L**, **4-R**). See photo below.
3. Connect **UPPER COMPUTER CABLE** (**41**) with **LOWER COM PUTER CABLE** (**42**), **UPPER TV SIGNAL CABLE** (**170**) with **LOWER TV SIGNAL CABLE** (**171**), **UPPER CONSOLE POWER CORD** (**172**) with **LOWER CONSOLE POWER CORD** (**173**), **UPPER NETWORK W/CABLE** (**174**) with **LOWER NEWORK W/Cable** (**175**), **UPPER CSAFE W/CABLE** (**176**) with **LOWER CSAFE W/CABLE** (**177**), **UPPER HDMI CABLE** (**180**) with **LOWER HDMI CABLE** (**181**).
   Slide the assembly into the left and right uprights.
4. Slide six **SPLIT WASHERS** (**117**) and **6 FLAT WASHERS** (**125**) onto **6 BUTTON HEAD SOCKET BOLTS** (**145**) on top of uprights. Be careful not to pinch the computer cable.

When assembling the **CONSOLE MOUNTING BRACKETS** (**3** & **4**) please be sure to slide the brackets all the way toward the back of the console before tightening the bolts.
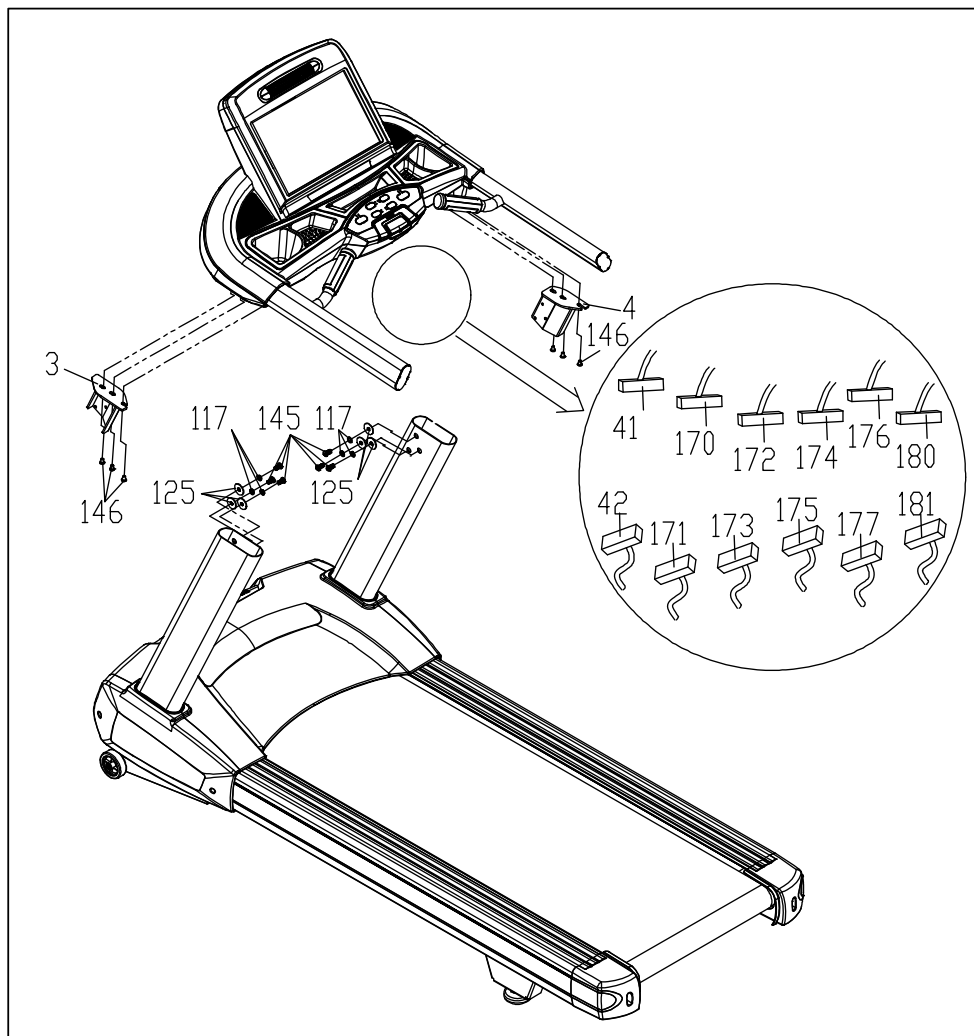
Step 4: Upright reinforcement

1. Gather **HARDWARE FOR STEP 4**.
2. Slide 2 **CURVED WASHERS** (**163**) and 2 **SPLIT WASHERS** (**117**) onto 2 **BUTTON HEAD SOCKET BOLTS** (**162**). Slide the **BOLTS** through the holes on the console masts and tighten.
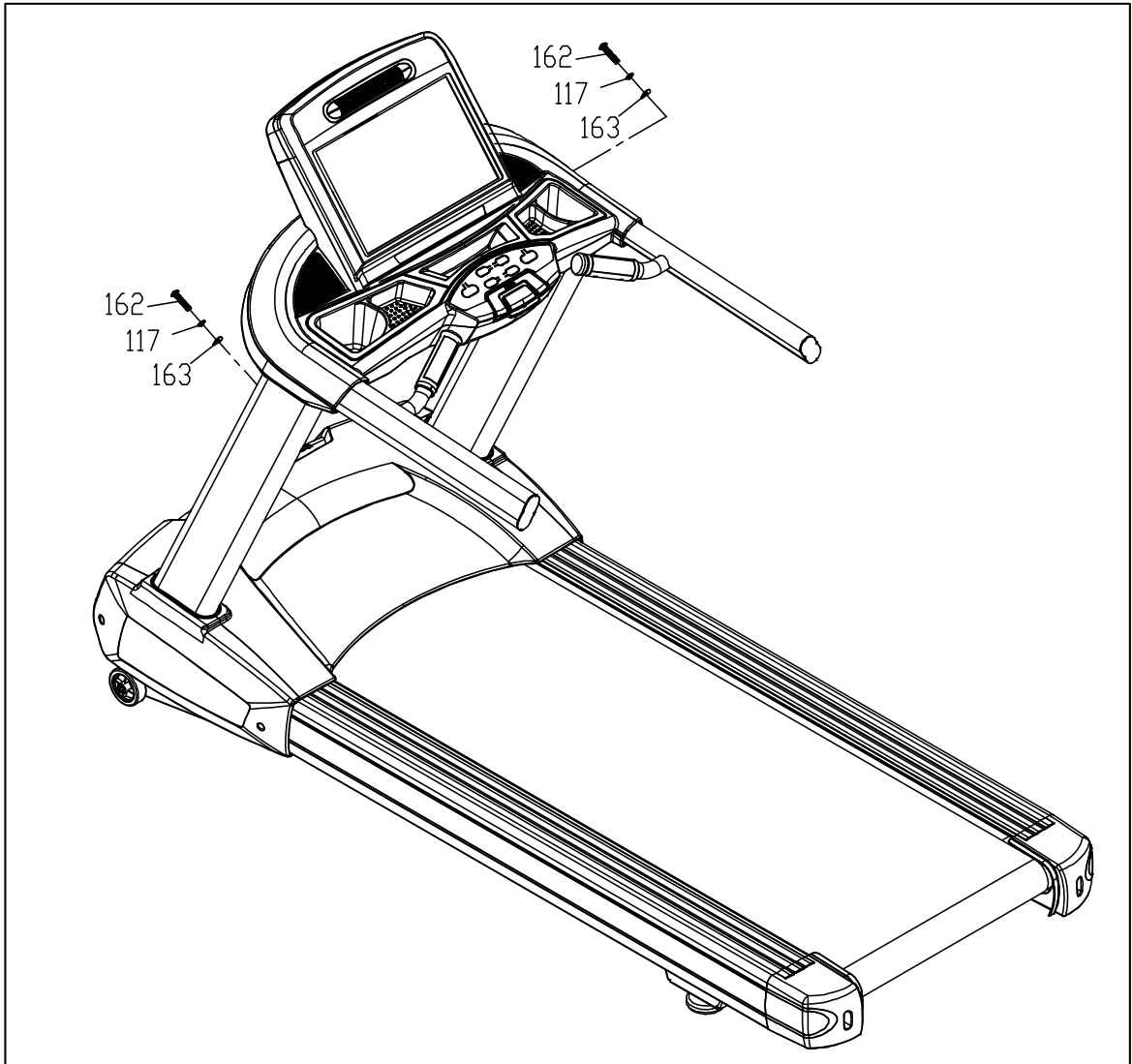
Operation of Your Treadmill

Getting familiar with the control panel
■ Console

Fan to keep you cool

Large Touch-Screen LCD

Home

TV

Language

Exercise Programs

Internet

To begin workout press the START key on the keypad below. To view an Exercise Program or change the Language, select either key above.

Twelve innovative programs offer a variety of work-outs

Convenient cargo compartment for keys, phone, or MP3 player

STOP

Easy-Touch Control Buttons

Starting the operation

Plug in the power cord and switch on the main power switch located at the front base of the treadmill and make sure that the safety key is put on as the treadmill is unable to operate without the safety key.

When the power is turned on, the screen will show the initial image and then enter the ready mode which is the beginning of the treadmill operation.

First page for you to operate by touching the icons.

Quick operating functional buttons are installed.

Quick Start
- Press **Start** button and the belt runs with 0.8 km/h (0.5 MPH).
- Press **Speed Up/Down** buttons further to adjust the speed.
- Press the Home button, the return arrow at the top of the screen or **Stop** button to stop the belt.

Featuring functions of this treadmill
Touch-control screen is installed for operating the treadmill. You can directly touch any functional button on the screen or through buttons on the console to control. On the bottom, there are **Speed Up/Down** buttons to control the speed, **Start** button to begin the workout, **Stop** button to pause/stop running.

Pause/Stop
• Press **Stop** button once or first page button on the screen, the belt will slow down gradually till fully stopped and keep values of time, distance and calorie on the screen. The screen will reset after 5 minutes of counting down then return to the previous status.
• Press **Start** button to continue the workout during pause.
• Press "STOP" button twice, the console will ask you if you want to end the workout. If "STOP" button is pressed the third time, the console will display your workout summary.

Incline
• The incline is changeable any time during the workout.
• Press **Incline Up/Down** button or **Incline +/- button** on the screen to change the incline to the desired level.

Heart Rate Feature
The Pulse (Heart Rate) on the screen shows the current value of the heart beats per minute. 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. This unit is also compatible with wireless chest strap.

To Turn Treadmill Off
The screen will automatically turn off (go to sleep) after 30 minutes of inactivity. This function is called sleep mode. In sleep mode, the treadmill will power down most everything except for a minimum of circuitry for detecting key presses and the safety key so it will start up again if these are activated. There is only a tiny amount of current used in sleep mode (about the same as your TV when it is turned off) and it is perfectly fine to leave the main power switch on in sleep mode. Of course you may also remove the safety key or turn off the main power switch to power down the treadmill.

Audio:
To listen to any audio source with this unit, you must plug a headset into the port on the console.

Touch Screen Operation
Language
There are four selections. Usually the "Language" is the first selection.

•**When you press "Language" button on the first page HOME, it enters the menu with all languages selection.**
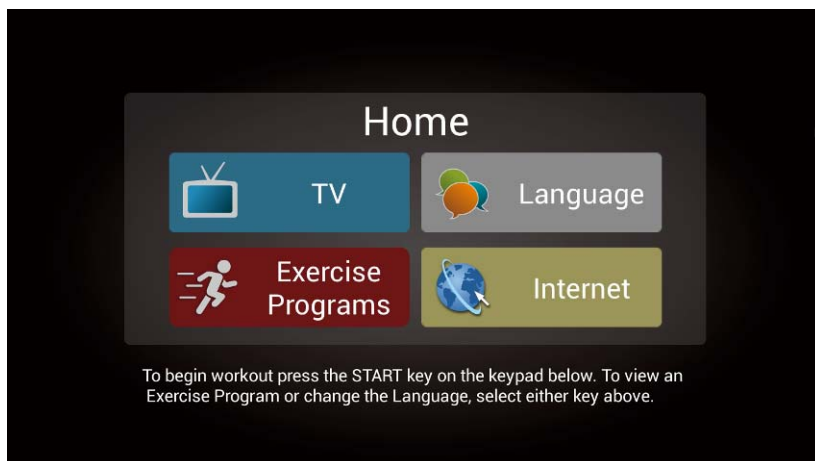
There are 12 languages to choose. Touch the desired language, and the system will return to the first page to begin the other program, or if you don't want to change the language, you could press **Home** button at the upper left corner to return to the first page.

TV

When the TV button on the **Home** page is pressed, it directly enters TV interface.

Now you can enjoy TV programs. If you want to enjoy TV while exercising, press **Start** button at front of the treadmill to start it.
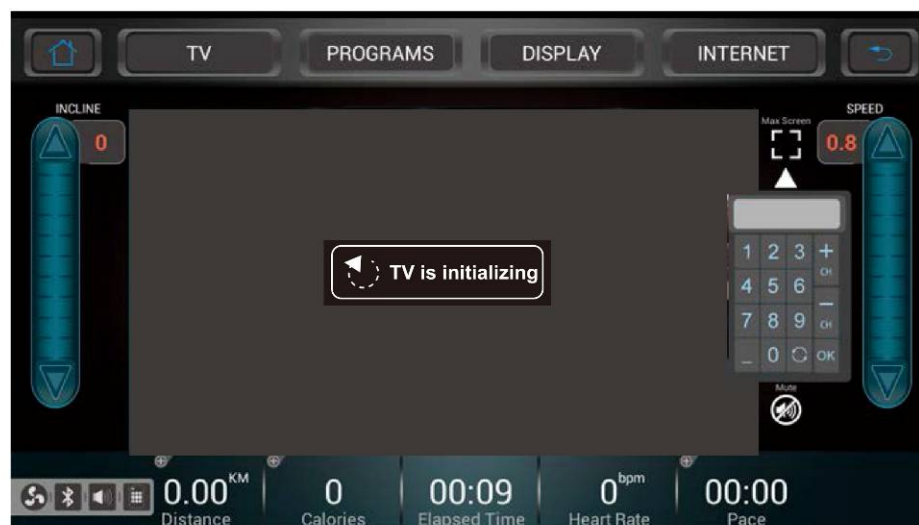
You can change the TV channel by using **Up/Down** buttons on the TV channel or the channel control panel buttons at the right side of the screen for quick channel switching. You can also use up/down buttons on the volume to change the sound volume. If you want to be quiet, touch **Mute** button. Touch **Max Screen** to switch to full screen. When you want to resume the original screen display, just touch the image and the screen resumes. Use **Speed Up/Down** buttons to control the speed and **Incline Up/Down** button to set the incline level during the exercise. When you want to pause, just press **Home** button at left top or press **Stop** button once and the pause window will show up. If you want to stop, you can choose to end the program or press **Stop** button again to terminate the setting (the console will display a message to ask you if you want to end the workout). Pressing the "STOP" button third time and the console will display a workout summary.

Internet

When the **Internet** button on the **Home** page is pressed, it directly enters Internet interface.

There are 6 internet connections to choose for you to go on the internet while you are exercising (internet cable connection or WIFI connection is required). Press "START" button of the treadmill to start it.

Use **Speed Up/Down** buttons to control the speed and **Incline Up/Down** button to set the incline level during the exercise. When you want to pause, just press **Home** button at left top or press **Stop** button once and the pause window will show up. If you want to stop, you can choose to end the program or press **Stop** button again to terminate the setting (the console will display a message to ask you if you want to end the workout). Pressing the "STOP" button third time and the console will display a workout summary.
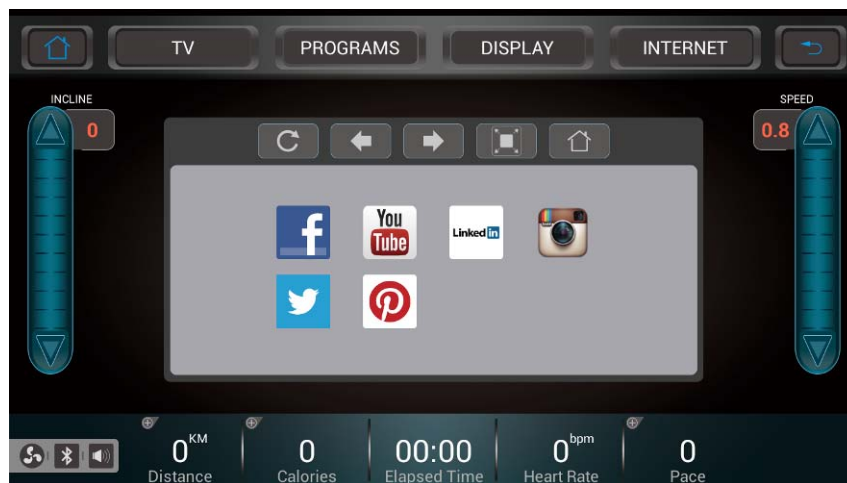
Exercise Programs

When the **Exercise** Program button on the **Home** page is pressed, it directly enters Menu interface. There are 12 program modes in Menu interface for you to choose the desired program mode.
For Manual Program as an example, just touch Manual button on the screen to enter the program for Manual.
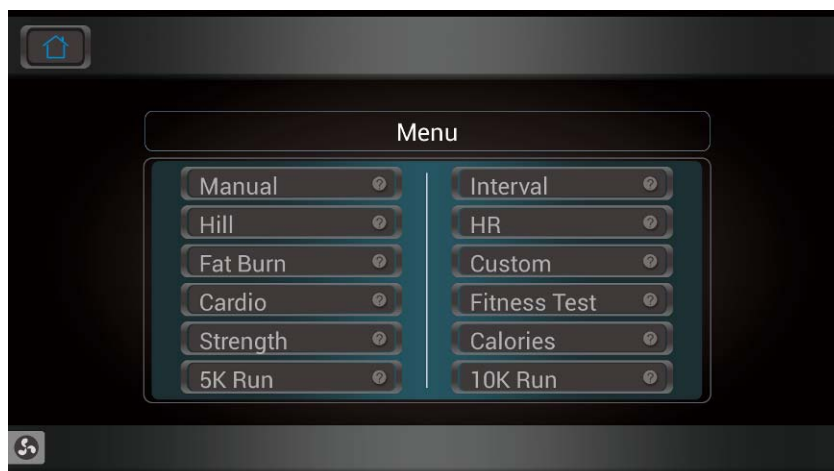
MANUAL
Press **Profile** button to enter the **Profile** interface. If this program is unwanted, just press **Home** icon at left top to return to the first page, or return icon at right top to return to the previous page to continue the last operation. If other profile is wanted, touch left or right arrow button to choose the wanted program.
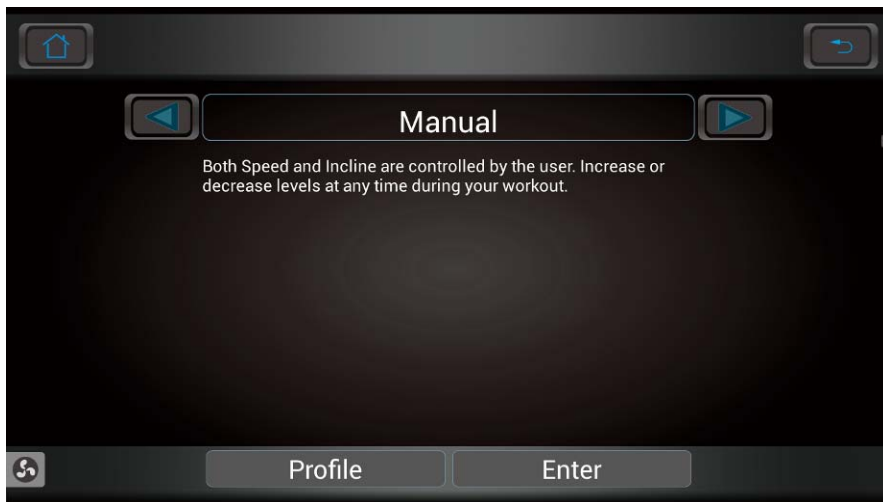
If it is the program you want, touch **Enter** button at the bottom to enter next image. If not, touch the **Home** icon at left top to return to the first page or the return icon at right top to return to the previous page to continue the last operation. If other profile is wanted, touch left or right arrow button to choose the wanted program.

The image entering the "Profile" interface is as below.
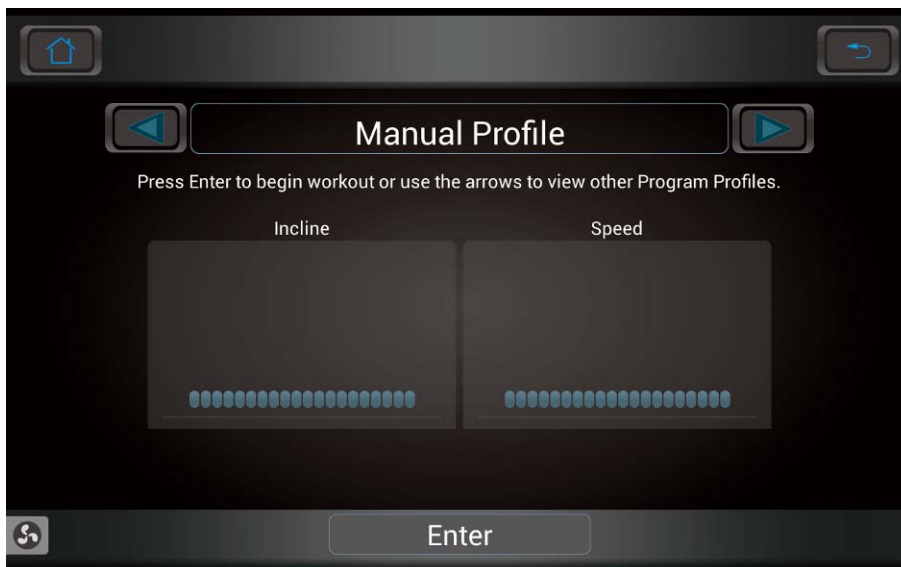
Setting Program Time

This image is for setting program time, user's age and weight. Press **Enter** button after entering parameters to confirm. Then press **Start** button to start the Manual Program. If not, just press **Home** icon at left top to return to the first page, or return icon at right top to return to the previous page to continue the last operation.
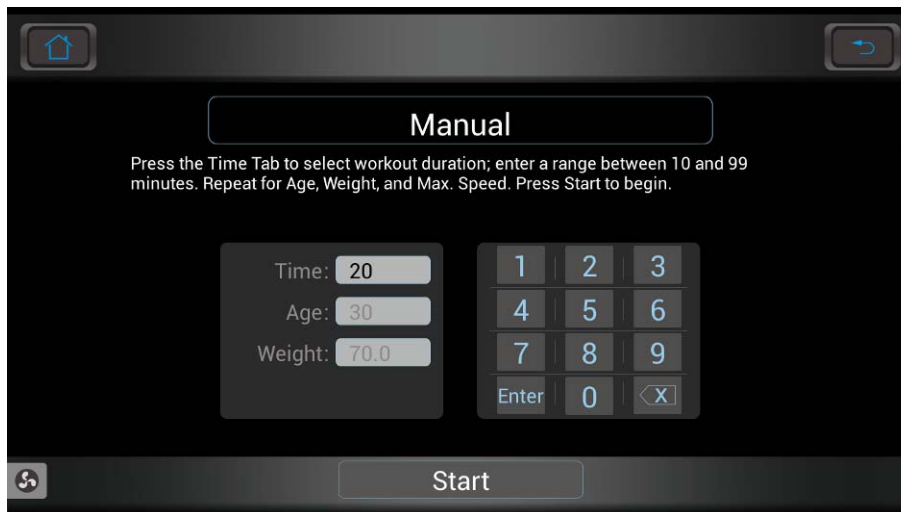
Display Options

Simple

After starting the program, a 'simple' workout view displays as below. It contains all values on the bottom concerning your workout.

The speed value is at right side while the incline level is at the left side and the value is adjustable with **Up** or **Down** button. The bar chart for the speed and incline is in the middle and to be used with **Speed** and **Incline** button to switch between them. **TV interface** button is on top to touch for entering the TV mode, or touch **Internet** for entering the internet interface. If **Program** button is touched, the system will ask you if you want to end the current workout. If **Display** button is touched, you can access the different workout views.

Track

The operating is similar only with different interface. The image shows the track with number of laps and other values.
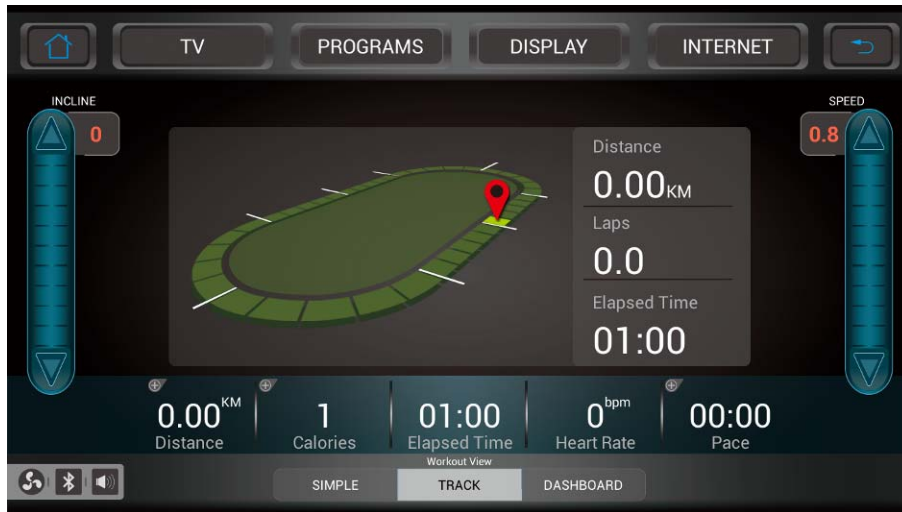
Dashboard

The operating is similar with a different interface only. You can choose one of three interfaces on the bottom with your own preference.
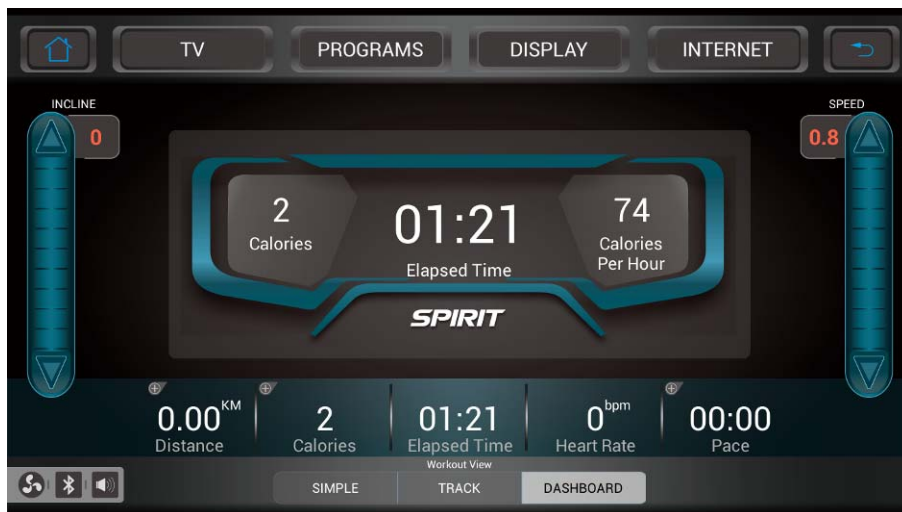
Stop Button

When using the first page button or **Stop** button to end the program, it enters the summary image. On the summary image, all accumulating values concerning the workout are displayed. You can touch the **Home** button at left top or press **Stop** button to return to the first page image.
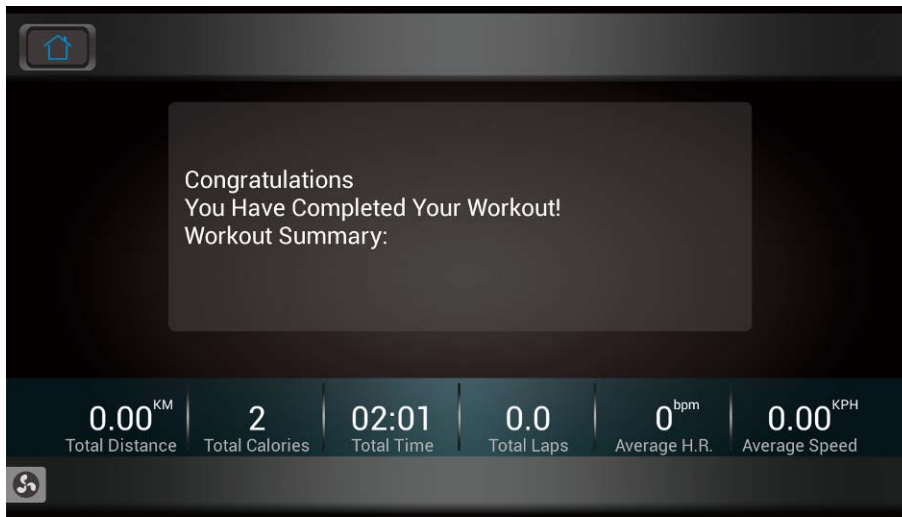
Programmable Features

To Select and Start a Preset Program

The Spirit Fitness CT850 ENT offers twelve preset programs: Hill, Fat Burn, Cardio, Calorie, Interval, Strength, 5K Run, 10K Run, HR, a Custom User defined program, Multiple based Fitness Tests and one Manual program.

1. Select a program then press the **Enter** key to begin customizing the program with your personal data, or just press the **Start** key 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 be darken with the default value of 20 minutes. You may use the numeric keypads to adjust the time. After adjusting the time, press **Enter**. (Note: Except for the Calorie Program, you may press **Start** at any time during the programming to begin with only settings you have modified at that point).

3. The touch Age window will now be darken a value indicating your Age. Entering the correct Age will affect the Heart rate bar graph accuracy and also needed for the HR programs. Use numeric keypads to make adjustments, and then press ENTER confirm. Default age is 30 years old. Range=10 to 110)

4. The touch Weight window will now be darken a value indicating your Bodyweight. Entering your correct bodyweight affects the Kcal readout accuracy. Use numeric keypads to make adjustments, and then press ENTER confirm. (Default weight is 154 lbs. Range=22 to 333.7)

5. The touch Max Speed window will now be darken a value indicating your Speed. Entering your correct Speed affects the Max Speed readout accuracy. Use numeric keypads to make adjustments, and then press ENTER confirm. (Default speed is 5.0 KM/H)

6. Now press the **Start** key to begin your workout, or the **Stop** button to return to the previous screen.

7. There will be a three 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 three minutes. (5K Run, 10K Run, HR, HR 2, Custom, Calorie, Military Fitness Test 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, then the first segment will be 2 mph. You will notice that segment 12 shows 100 which means, the speed will be set to 100% of 10 mph or simply 10 mph.

Prog	SEG	Warm up			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Cool down		
Hill	Speed	20	30	40	50	62.5	62.5	70	70	75	75	87.5	87.5	100	100	87.5	87.5	75	75	70	70	62.5	62.5	80	40	30	20
	Incline	0	0	0	0	1	2	3	3	4	3	4	4	5	3	4	3	4	5	4	3	1	1	0	0	0	0
Fatburn	Speed	20	30	40	50	62.5	75	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	75	50	40	30	20
	Incline	0	0	0	0	1	2	3	3	4	5	3	4	4	3	2	3	4	5	6	4	2	1	0	0	0	0
Cardio	Speed	20	30	40	50	60	60	70	70	70	80	70	70	80	80	60	70	80	80	70	70	70	100	70	40	30	20
	Incline	0	0	0	0	1	1	2	2	3	2	2	3	1	2	3	2	2	4	2	3	1	1	0	0	0	0
Strength	Speed	20	30	40	50	62.5	62.5	70	70	75	75	80	80	87.5	95	95	100	100	100	100	100	87.5	75	50	40	30	20
	Incline	0	0	0	0	1	2	4	6	8	7	6	5	4	3	3	4	5	7	7	5	3	1	0	0	0	0
Interval	Speed	20	30	40	50	62.5	62.5	100	100	62.5	62.5	100	100	62.5	62.5	100	100	62.5	62.5	100	10	62.5	62.5	50	40	30	20
	Incline	0	0	0	0	1	2	3	5	2	3	6	2	3	7	2	3	8	2	3	5	3	1	0	0	0	0

Calorie Program

1. Select a CALORIE program then press the ENTER key to begin customizing the program with your personal data, or just press the start key to begin the program with the default settings.
2. The touch Calories window will now be darken a value indicating your consume calories. Use numeric keypads to make adjustments, and then press ENTER to confirm, display takes time and modify.
3. Now press the START key to begin your workout.

Custom Program

1. Select a Custom program then press the ENTER key to begin customizing the program with your personal data, or just press the start key to begin the program with the default settings.
2. The window will show the corresponding speed profile and incline profile, user can choose rename program by touching rename icon and entering profile. After new setting, speed profile and incline profile will be show on screen for adjustment.
3. Press next key icon for new speed profile and incline profile then pop out next message window for Time, Age, Weight and Max Speed entry.
4. Now press the START key to begin your workout test for new program.

5K/10K 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 key is pressed the DM displays the 8 different tests available: Gerkin, WFI (Modified Gerkin), Army (PFT), Navy (PRT), Air Force (PRT), Marines (PFT), Physical Efficiency Battery (PEB) For U.S. Federal Law Enforcement, US Coast Guard.

Fitness Test Operation

1. The **Message Window** will ask you to enter your **Weight**.
2. You are now asked to enter your **Age**.
3. You are now asked to enter your **Gender**.
4. Now press **Start** to begin the test.

Army

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

Age	Male	Female
<20	12:36	16:22
20-30	14:00	16:57
40-49	14:52	18:14
50-59	16:22	19:42
60+	18:14	22:28

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

Navy

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

Age	Male	Female	Age	Male	Female
17-21	16:36	19:42	45-49	16:09	17:02
22-26	17:30	20:36	50-54	16:46	17:27
27-31	17:54	21:42	55-59	17:10	18:35
32-36	18:48	23:06	60-64	18:53	19:44
37-41	19:30	24:06	65+	20:36	20:53

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

Marines

A timed 3 mile 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-Navy

Gerkin

The Gerkin protocol, also known as the fireman's protocol, and is a submax 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 (Vo2 max) as shown in the chart below.

Stage	Time	Speed	Grade	VO2 Max	Stage	Time	Speed	Grade	VO2 Max
1	0 to 1:00	7.2KPH	0%	31.15	1	0 to 1:00	4.5MPH	0%	31.15
2.1	**1:00**	7.2KPH	2%	32.55	2.1	**1:00**	4.5MPH	2%	32.55
2.2	1:30	7.2KPH	2%	33.6	2.2	1:30	4.5MPH	2%	33.6
2.3	1:45	7.2KPH	2%	34.65	2.3	1:45	4.5MPH	2%	34.65
2.4	2:00	8.0KPH	2%	35.35	2.4	2:00	5.0MPH	2%	35.35
3.1	2:15	8.0KPH	2%	37.45	3.1	2:15	5.0MPH	2%	37.45
3.2	2:30	8.0KPH	2%	39.55	3.2	2:30	5.0MPH	2%	39.55
3.3	2:45	8.0KPH	2%	41.3	3.3	2:45	5.0MPH	2%	41.3
3.4	3:00	8.0KPH	4%	43.4	3.4	3:00	5.0MPH	4%	43.4
4.1	3:15	8.0KPH	4%	44.1	4.1	3:15	5.0MPH	4%	44.1
4.2	3:30	8.0KPH	4%	45.15	4.2	3:30	5.0MPH	4%	45.15
4.3	3:45	8.0KPH	4%	46.2	4.3	3:45	5.0MPH	4%	46.2
4.4	4:00	8.8KPH	4%	46.5	4.4	4:00	5.5MPH	4%	46.5
5.1	4:15	8.8KPH	4%	48.6	5.1	4:15	5.5MPH	4%	48.6
5.2	4:30	8.8KPH	4%	50	5.2	4:30	5.5MPH	4%	50
5.3	4:45	8.8KPH	4%	51.4	5.3	4:45	5.5MPH	4%	51.4
5.4	5:00	8.8KPH	6%	52.8	5.4	5:00	5.5MPH	6%	52.8
6.1	5:15	8.8KPH	6%	53.9	6.1	5:15	5.5MPH	6%	53.9
6.2	5:30	8.8KPH	6%	54.9	6.2	5:30	5.5MPH	6%	54.9
6.3	5:45	8.8KPH	6%	56	6.3	5:45	5.5MPH	6%	56
6.4	6:00	9.6KPH	6%	57	6.4	6:00	6.0MPH	6%	57
7.1	6:15	9.6KPH	6%	57.7	7.1	6:15	6.0MPH	6%	57.7
7.2	6:30	9.6KPH	6%	58.8	7.2	6:30	6.0MPH	6%	58.8
7.3	6:45	9.6KPH	6%	60.2	7.3	6:45	6.0MPH	6%	60.2
7.4	7:00	9.6KPH	8%	61.2	7.4	7:00	6.0MPH	8%	61.2
8.1	7:15	9.6KPH	8%	62.3	8.1	7:15	6.0MPH	8%	62.3
8.2	7:30	9.6KPH	8%	63.3	8.2	7:30	6.0MPH	8%	63.3
8.3	7:45	9.6KPH	8%	64	8.3	7:45	6.0MPH	8%	64
8.4	8:00	10.4KPH	8%	65	8.4	8:00	6.5MPH	8%	65
9.1	8:15	10.4KPH	8%	66.5	9.1	8:15	6.5MPH	8%	66.5
9.2	8:30	10.4KPH	8%	68.2	9.2	8:30	6.5MPH	8%	68.2
9.3	8:45	10.4KPH	8%	69	9.3	8:45	6.5MPH	8%	69
9.4	9:00	10.4KPH	10%	70.7	9.4	9:00	6.5MPH	10%	70.7
10.1	9:15	10.4KPH	10%	72.1	10.1	9:15	6.5MPH	10%	72.1
10.2	9:30	10.4KPH	10%	73.1	10.2	9:30	6.5MPH	10%	73.1
10.3	9:45	10.4KPH	10%	73.8	10.3	9:45	6.5MPH	10%	73.8
10.4	10:00	11.2KPH	10%	74.9	10.4	10:00	7.0MPH	10%	74.9
11.1	10:15	11.2KPH	10%	76.3	11.1	10:15	7.0MPH	10%	76.3
11.2	10:30	11.2KPH	10%	77.7	11.2	10:30	7.0MPH	10%	77.7
11.3	10:45	11.2KPH	10%	79.1	11.3	10:45	7.0MPH	10%	79.1
11.4	11:00	11.2KPH	10%	80	11.4	11:00	7.0MPH	10%	80

Fitness Test Programming

1. Press the **Fit-Test** button (8 Different tests available)
2. The **Message Window** will ask you to enter your **Gender**. You may adjust the age and weight setting by using the numeric keypad.
3. Now press **Start** to begin the test.

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 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 Message Window.

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 for male and fitted female

	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 for female and non-fitted male

	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

Target 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 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. 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 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 heart rate training zone for either cardiovascular fitness or weight loss is represented by two different lines, which 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.
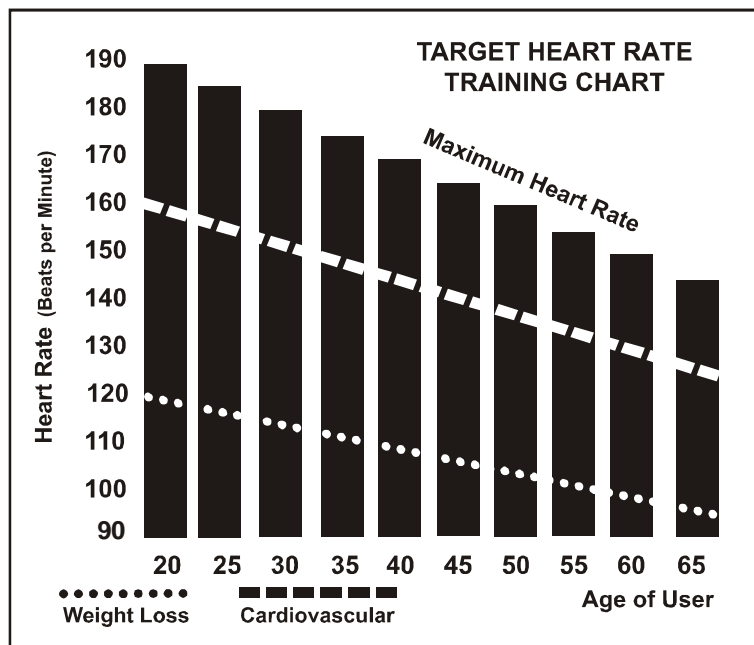
CAUTION!
The target value used in HR-1 and HR-2 programs is a suggestion only for normal, healthy individuals. Do not exceed your limits! You may not be able to obtain your chosen target. If in question, enter a higher age value that will set a lower target goal.

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 known 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.

1. Attach the transmitter to the elastic strap using the interlocking key.
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 torso 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 directly 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 directly on bare skin assures you of proper operation. If you wish, you may wear the transmitter over a shirt. To do so, wet the areas of the shirt that the electrodes will rest upon.
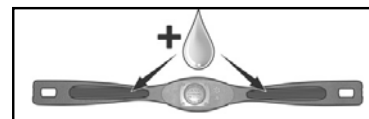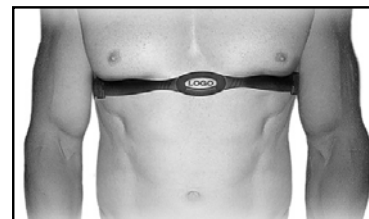
Note: The transmitter is automatically activated when it detects activity from the user's heart. Additionally, it automatically deactivates when it does not receive any activity. Although the transmitter is water resistant, moisture can have the effect of creating false signals, so you should take precautions to completely dry the transmitter after use to prolong battery life (estimated transmitter battery life is 2500 hours). If your chest strap has a replaceable battery 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. 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 Spirit Fitness 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 Dyaco Canada Inc.

Heart Rate Control Operation

How the Heart Rate Control Program Works:
Heart Rate Control (HRC) uses your treadmill's incline system to adjust 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 HR program. The Weight Control program will attempt to maintain your heart rate at 65% 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. Press HR button and press ENTER.
2. The touch Time/Age/Weight/Target HR (65%) window will now be darken a value indicating your Numerical.
3. Now press START to begin the test.
4. During the program you may increase or decrease the target heart rate by pressing the Incline Up/Down buttons.

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:

- 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.
- 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.

EXPLODED VIEW DIAGRAM

Optional
99

20160518 15:00

CUSTOMER SERVICE 1-888-707-1880
EMAIL: customerservice@dyaco.ca

Dyaco Canada Inc. 2017
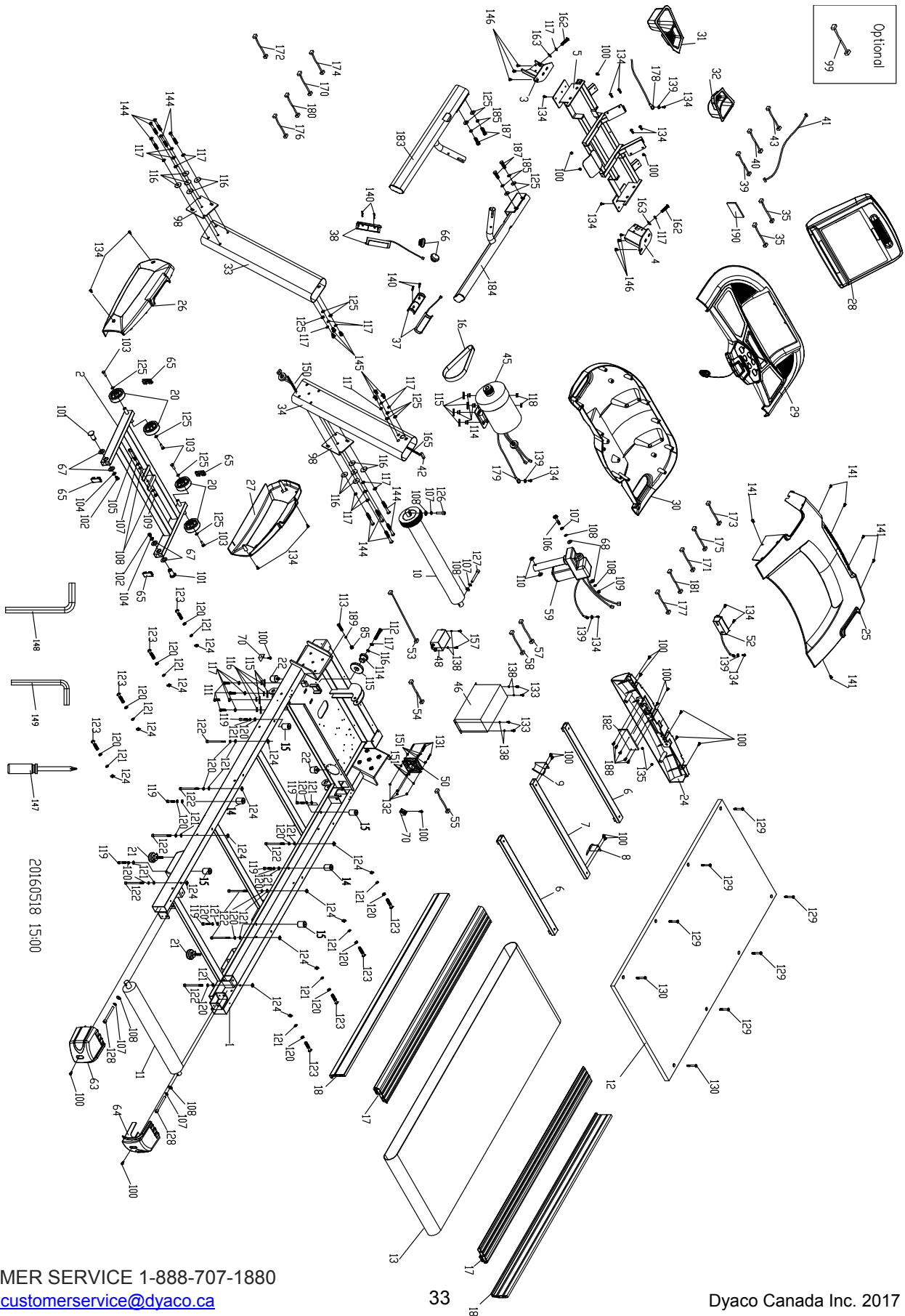
PARTS LIST

Key	Part	Description	Q'ty
1	16085001	Main Frame	1
2	16085002	Incline Bracket	1
3	16085003	Mounting Bracket (L)	1
4	16085004	Mounting Bracket (R)	1
5	16085005	Console Support	1
6	16085006	Running Deck Stabilizer Assembly(A)	2
7	16085007	Running Deck Stabilizer Assembly(B)	1
8	16085008	Belt Guide(R)	1
9	16085009	Belt Guide(L)	1
10	16085010	Front Roller W/Pulley	1
11	16085011	Rear Roller	1
12	16085012	Running Deck	1
13	16085013	Running Belt	1
14	16085014	Cushion A(M8×Ø30×37L)	2
15	16085015	Cushion B(M8×Ø30×37L)	4
16	16085016	Drive Belt	1
17	16085017	Aluminum Foot Rail(122×39×1390L)	2
18	16085018	Aluminum Foot Rail(125×29×1390L)	2
20	16085020	Transportation Wheel	4
21	16085021	Foot Pad(Ø75(3/8"-16UNC)	2
22	16085022	Incline Rubber Foot	2
24	16085024	Front Motor Cover	1
25	16085025	Motor Top Cover	1
26	16085026	Motor Base Cap (L)	1
27	16085027	Motor Base Cap (R)	1
28	16085028	Console Assembly	1
29	16085029	Rack Top Cover	1
30	16085030	Rack Bottom Cover	1
31	16085031	Beverage Holder (L)	1
32	16085032	Beverage Holder (R)	1
33	16085033	Left Upright	1
34	16085034	Right Upright	1
35	16085035	500m/m_Ground Wire	2
37	16085037	900m/m_Handpulse Assembly(SMP-03)	1
38	16085038	900m/m_Handpulse Assembly(SMR-03)	1
39	16085039	700m/m_Handpulse Wire (Upper)	1
40	16085040	600m/m_Handpulse Wire (Upper)	1
41	16085041	900m/m_Computer Cable (Upper)	1
42	16085042	1700m/m_Computer Cable (Lower)	1
43	16085043	700m/m_Keyboard Wire	1
45	16085045	AC Motor(KSP341,220V)	1
46	16085046	3HP Inverter	1
48	16085048	Filter	1

Key	Part	Description	Q'ty
50	16085050	Fan	1
52	16085052	AC Electronic Module	1
53	16085053	450m/m_Connecting Wire (White)	1
54	16085054	450m/m_Connecting Wire (Black)	1
55	16085055	250m/m_Motor Fan Connecting Cable	1
57	16085057	350m/m_Connecting Wire,Power Cord	1
58	16085058	80m/m_Connecting Wire(White)	1
59	16085059	Incline Motor	1
63	16085063	Rear Adjustment Base (L)	1
64	16085064	Rear Adjustment Base (R)	1
65	16085065	Square End Cap	4
66	16085066	Handpulse End Cap	2
67	16085067	Stable Wheel Spacer	4
68	16085068	Ø10 × Ø25 × 0.8T_Nylon Washer	2
70	16085070	Motor Cover Anchor	2
85	16085085	Speaker End Cap	1
98	16085098	Retaining Plate	2
99	16085099	Power Cord	1
100	160850100	5 × 20m/m_Tapping Screw	19
101	160850101	Ø18 × Ø19 × 41L_Carriage Bolt	2
102	160850102	M8 × 12m/m_Hex Head Bolt	2
103	160850103	3/8" × 25m/m_Hex Head Bolt	4
104	160850104	Ø8.5 × Ø26 × 2.0T_Flat Washer	2
105	160850105	M10 × 65L_Hex Head Bolt	1
106	160850106	M10 × P1.5 × 50L_Hex Head Bolt	1
107	160850107	Ø10 × 1.5T_Spring Washer	6
108	160850108	Ø3/8" × Ø19 × 1.5T_Flat Washer	8
109	160850109	M10 × P1.5 × 8T_Nyloc Nut	2
110	160850110	Ø10 × Ø24 × 2T_Nylon Washer	2
111	160850111	3/8" × 16 × 1-1/2"_Socket Head Cap Bolt	4
112	160850112	3/8" × 2-1/2"_Hex Head Bolt	1
113	160850113	3/8" × UCN16 × 2"_Socket Head Cap Bolt	1
114	160850114	Ø10 × Ø14 × 14L_Isolation Bushing	5
115	160850115	Ø13 × Ø35 × 5T_Nylon Washer	9
116	160850116	Ø3/8" × 35 × 2.0T_Flat Washer	15
117	160850117	Ø10 × 2.0T_Spring Washer	23
118	160850118	3/8" × 7T_Nyloc Nut	2
119	160850119	M8 × P1.25 × 40L_Socket Head Cap Bolt	6
120	160850120	Ø8 × 1.5T_Spring Washer	22
121	160850121	Ø5/16" × 16 × 1.0T_Flat Washer	22
122	160850122	M8 × 1.25 × 90L_Socket Head Cap Bolt	8
123	160850123	M8 × 55m/m_Hex Head Bolt	8
124	160850124	M8 × 1.25 × 6.5T_Nut	16
125	160850125	Ø3/8" × Ø25 × 2.0T_Flat Washer	14
126	160850126	M10 × 40m/m_Socket Head Cap Bolt	1
127	160850127	M10 × 80m/m_Socket Head Cap Bolt	1

Key	Part	Description	Q'ty
128	160850128	M10 × 100m/m_Socket Head Cap Bolt	2
129	160850129	M8 × P1.25 × 55L_Flat Head Countersink Bolt	6
130	160850130	M8 × 35m/m_Flat Head Countersink Bolt	2
131	160850131	M3 × 50m/m_Phillips Head Screw	4
132	160850132	M3 × 5T_Nyloc Nut	4
133	160850133	M5 × 20m/m_Phillips Head Screw	4
134	160850134	M5 × 12m/m_Phillips Head Screw	16
135	160850135	M5 × 5T_Nyloc Nut	2
138	160850138	Ø5 × 1.5T_Spring Washer	6
139	160850139	M5_Star Washer	4
140	160850140	3 × 25L_Tapping Screw	4
141	160850141	5 × 12m/m_Sheet Metal Screw	6
144	160850144	3/8" × 3"_Button Head Socket Bolt	10
145	160850145	3/8" × 3/4"_Button Head Socket Bolt	6
146	160850146	M8 × 12m/m_Socket Head Cap Bolt	6
147	160850147	Phillips Head Screw Driver	1
148	160850148	L Allen Wrench	1
149	160850149	L Allen Wrench(6m/m)	1
150	160850150	Ending Tape(400m/m)	1
151	160850151	Isolation Pad	8
157	160850157	M5 × 12m/m_Phillips Head Screw	2
162	160850162	3/8" × UNC16 × 1-3/4"_Button Head Socket Bolt	2
163	160850163	Ø10 × Ø23 × 1.5T_Curved Washer	2
165	160850165	Ending Tape(200m/m)	1
170	160850170	900m/m_TV Signal Cable(Upper)	1
171	160850171	2400m/m_TV Signal Cable(Lower)	1
172	160850172	900m/m_Power Cord(Upper)	1
173	160850173	1700m/m_Power Cord(Lower)	1
174	160850174	900m/m_network W/Cable(Upper)	1
175	160850175	2400m/m_network W/Cable(Lower)	1
176	160850176	900m/m_CSAFE Connecting Wire(Upper)	1
177	160850177	2400m/m_CSAFE Connecting Wire(Lower)	1
178	160850178	300m/m_Ground Wire	1
179	160850179	300m/m_Motor Ground Wire	1
180	160850180	900m/m_HDMI Cable(Upper)	1
181	160850181	2400m/m_HDMI Cable(Lower)	1
182	160850182	combo board-HDMI/TV/CSAFE/network	1
183	160850183	Handle Bar (L)	1
184	160850184	Handle Bar (R)	1
185	160850185	Ø10 × 2T_Spring Washer	4
187	160850187	3/8" × 1-1/2"_Hex Head Bolt	4
188	160850188	3 × 10m/m_Sheet Metal Screw	5
189	160850189	Ø5 × Ø10 × 1.0T_Flat Washer	1
190	160850190	HR monitor module	1

General Maintenance

Task	How To	Daily	Weekly	Monthly	Semi-Annually	Annually
Wipe Down Unit	Damp cloth w/ water	●				
Clean Under Belt	Towel or vacuum			●		
Check Belt Tension/Tracking	Feel/Visual		●			
Clean Under Motor Cover	Vacuum carefully				●	
Check Hardware	Wrench			●		
Inspect for Deck Wear	Visual				●	
Inspect Drive Belt	Visual				●	

Belt / Deck

Your treadmill uses a very high-efficient low-friction hard waxed deck. 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 hard wax deck is designed to withstand up to 20,000 miles on each side. If the original side of the deck shows significant wear, it needs to be flipped. Contact your service technician for assistance. Do not apply any type of lubricant or wax to the surface.

Belt Adjustments

Tread-belt Tension Adjustment - Belt tension is not critical for most users. It is very important though for joggers and runners in order to provide a smooth, steady running surface.

Adjustment must be made from the rear roller with the 8mm Allen wrench provided in the parts package. The adjustment bolts are located at the end of the step rails as shown in the diagram below.

Tighten the rear roller only enough to prevent slippage at the front roller. Turn the tread-belt tension adjusting bolts 1/4 turn each and inspect for proper tension by walking on the belt and making sure it is not slipping or hesitating with each step. When an adjustment is made to the belt tension, you must be sure to turn the bolts on both sides evenly or the belt could start tracking to one side instead of running in the middle of the deck.
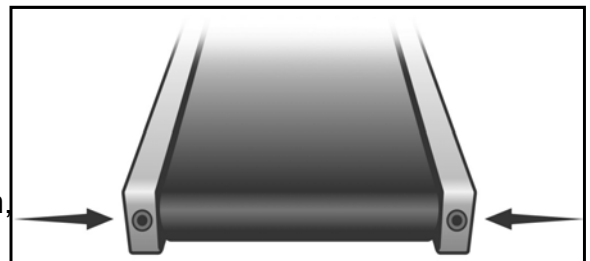
DO NOT OVERTIGHTEN –Over tightening will cause belt damage and premature bearing failure. If you tighten the belt a lot and it still slips, the problem could actually be the drive belt - located under the motor cover - that connects the motor to the front roller. If that belt is loose it feels similar to the walking belt being loose. Tightening the motor belt should be done by a trained service person.
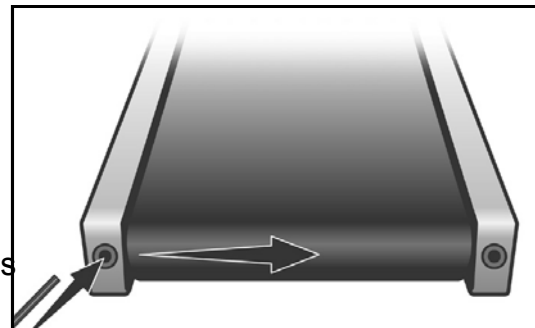
TREADBELT TRACKING ADJUSTMENT

The treadmill is designed so that the tread-belt remains reasonably centered while in use. It is normal for some belts to drift near one side while in use, depending on a user's gait and if they favor one leg.

But if during use the belt continues to move toward one side, adjustments are necessary.

Setting Tread-belt Tracking

An 8mm Allen wrench is provided for this adjustment. Make tracking adjustments on the left side bolt. Set belt speed at 3 mph. Be aware that a small adjustment can make a dramatic difference which may not be apparent right away. If the belt is too close to the left side, then turn the bolt only a 1/4 turn to the right (clockwise) and wait a few minutes for the belt to adjust itself. Continue to make 1/4 turns until the belt stabilizes in the center of the running deck.

If the belt is too close to the right side, turn the bolt counter-clockwise. The belt may require periodic tracking adjustment depending on use and walking/running characteristics. Some users may 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 Spirit Fitness warranty.

CALIBRATION PROCEDURE

1. Remove the safety key
2. Press and hold down the Start and Fast + buttons and replace the safety key. Continue to hold the Start and Fast key until the window displays "Factory settings", then press the Enter key.
3. You will now be able to set the display to show Metric or English settings (Miles vs. Kilometers). To do this, press the up or down key 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. Grade return–On (This allows the incline to return to zero when Stop is pressed. For sale in Europe, EU standards require this to be off)
9. Press Start to begin calibration. The process is automatic; the speed will start up without warning, so do not stand on the belt.

Adjusting The Speed Sensor

If the calibration does not pass you may need to check the speed sensor alignment.

1. Remove the motor cover hood by loosening the 8 screws that hold it in place. Set it aside.

2. The speed sensor is located on the left side of the frame, right next to the front roller pulley (the pulley will have a belt around it that also goes to the motor). The speed sensor is a small rectangular shaped black box with a wire connected to it.

3. You will see a magnet on the outside edge of the pulley; make sure the speed sensor is aligned with the center of the magnet when it passes by. There are two a screws that hold the sensor in place that need to be loosened to adjust the sensor. Re-tighten the screws when finished.

Service Checklist - Diagnosis Guide

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 120 VAC wall outlet. 4) Breaker panel circuit breaker may be tripped. 5) Treadmill defect. Contact your SPIRIT 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 "Low Speed", run calibration. 2) If you press start and the belt **never** moves, then the display shows Low Speed, contact service.
Circuit breaker trips, but not the treadmill circuit breaker	Need to replace the breaker with a "High In-rush current" type breaker.
Treadmill will only achieve approximately 12 mph 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 14 gauge minimum. Low household voltage. Contact an electrician or your SPIRIT dealer. A minimum of 120 volt AC current is required.
Tread-belt stops quickly/suddenly when tether cord is pulled	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
Treadmill trips on board 20 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.

Manufacturer's Limited Warranty

Dyaco Canada Inc. warrants all its Spirit treadmill for a period of time listed below, from the date of retail sale, as determined by a sales receipt. Dyaco Canada Inc.'s responsibilities include providing new or remanufactured parts, at Dyaco Canada Inc.'s option, and technical support to our independent dealers and servicing organizations. In the absence of a dealer or service organization, these warranties will be administered by Dyaco Canada Inc. directly to a consumer. The warranty period applies to the following components:

	Home Warranty:	Commercial (Non-Dues Paying Facility)
Frame	Lifetime	Lifetime
Motor	Lifetime	5 Years
Deck	10 Years	5 Years
Parts	10 Years	5 Years
Labour	2 Years	2 Years
Console	3 Years Parts, 1 Year Labour	3 Years Parts, 1 Year Labour

This warranty is not transferable and is extended only to the original owner.

The warranty shall not apply to exercise units which are (1) used for commercial dues paying facilities or other income producing purposes, or (2) subject to misuse, neglect, accident or unauthorized repair and alterations.

This warranty provided herein is lieu of all other express warranties, any implied warranties, including any implied warranties of merchantability of fitness for particular purpose, are limited in duration to the first 24 months from date of purchase. All other obligations or liabilities, including liability for consequential damages are hereby excluded.

REPAIR PARTS AND SERVICE

All of the parts for the treadmill shown in figure can be ordered from Dyaco Canada Inc. 5955 DON MURIE STREET, NIAGARA FALLS, ONTARIO L2G 0A9. When ordering parts, the parts will be sent and billed at the current prices. Prices may be subject to change without notice. Check or money order must accompany all orders. Standard hardware items are available at your local hardware store.

To ensure prompt and correct handling of any errors, or to answer any questions, please call our Toll Free number: 1-888-707-1880, or local number 1-905-353-8955 or fax 1-905-353-8968 or email: customerservice@dyaco.ca. Office hours are from 8:30 AM to 5:00 PM Monday to Friday Eastern Standard Time.

Always include the following information when ordering parts.
- Model number
- Name of each part
- Part number of each part

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