

CT900 TREADMILL
OWNER'S MANUAL

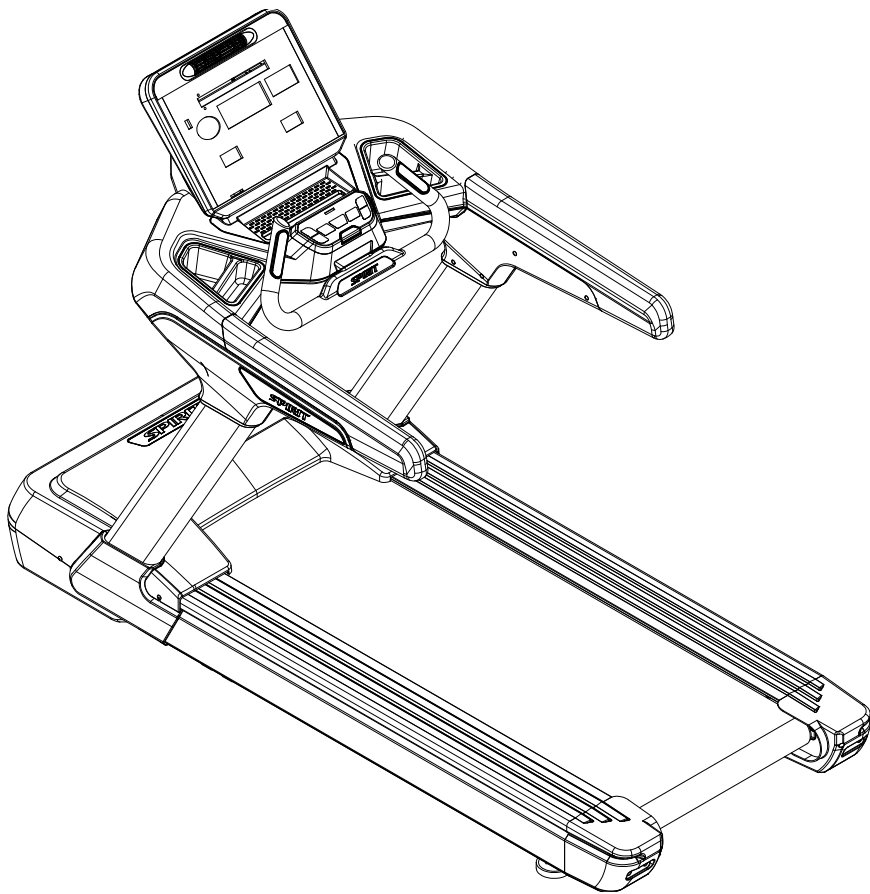


TABLE OF CONTENTS

3	IMPORTANT SAFETY INSTRUCTIONS
4	IMPORTANT ELECTRICAL INSTRUCTIONS
6	IMPORTANT OPERATION INSTRUCTIONS
6	PRODUCT REGISTRATION
7	CT900 ASSEMBLY INSTRUCTIONS
13	CONSOLE OPERATION
19	PROGRAMMABLE FEATURES
36	GENERAL MAINTENANCE
37	MANUFACTURER'S LIMITED WARRANTY

Thank you for purchasing our product, please save these instructions. Please do not perform or attempt any customizing, adjustments, repair or maintenance that is not described in this manual.



Congratulations on your new treadmill and welcome to the Spirit Fitness family!

Thank you for your purchase of this quality treadmill from Spirit Fitness. 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, Spirit Fitness will do all we can to make your ownership experience as pleasant as possible for many years to come. If not purchased direct from Spirit Fitness, the local dealership where you purchased this treadmill is your administrator for all Spirit Fitness 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.

Yours in Health,
Spirit Fitness

NAME OF DEALER _____

DEALER PHONE # _____

PURCHASE DATE _____

IMPORTANT SAFETY INSTRUCTIONS

DANGER —To reduce the risk of electric shock, always unplug this 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:

- 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.
- 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 drop or insert any object into any openings.
- Do not use outdoors.
- 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 elliptical. Quality athletic shoes are recommended to avoid leg fatigue.
- Maximum User Weight: 450 lbs,
- This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Keep children under the age of 13 away from this machine.
- Never operate this treadmill if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water.
- Keep the cord away from heated surfaces.
- Do not operate where aerosol (spray) products are being use or where oxygen is being administered.
- Connect this treadmill to a properly grounded outlet only. See Grounding Instructions.
- ASTM F2115-05 Specifications 6.1.2.11 —The recommended minimum clearance required around each treadmill for access to, passage around, and emergency dismount shall be stated. The minimum dimensions are to be: 0.5 m (19.7 in.) on each side of the treadmill, and 1 m (39 in.) behind the machine.

SAVE THESE INSTRUCTIONS - THINK SAFETY!

IMPORTANT ELECTRICAL INSTRUCTIONS

WARNING

- NEVER use a ground fault circuit interrupt (GFCI) wall outlet with this treadmill. As with any appliance with a large motor, the GFCI will trip often. 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.
- 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 operating temperature specification is 40 to 120 degrees Fahrenheit, and humidity is 95% non-condensing (no water drops forming on surfaces).
- Circuit Breakers: Some circuit breakers are not rated for high inrush currents that can occur when a treadmill is first turned on or even during use. If your treadmill is

tripping the circuit breaker (even though it is the proper current rating) but the circuit breaker on the treadmill itself does not trip, you will need to replace the facility 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. The electrical outlet used should have a dedicated 20-amp circuit breaker.

GROUNDING INSTRUCTIONS

This product must be grounded. If the treadmill should malfunction or break down, 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 110-volt/20 amp dedicated circuit, and has a grounding plug that looks like the plug illustrated below. A temporary adapter that looks like the adapter illustrated may be used to connect this plug to a 2-pole receptacle as shown if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet 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 console.
- Understand that changes in speed or incline do not occur immediately. Set your desired speed or incline level on the computer console and release the adjustment button. The computer will obey the command gradually.
- Use caution while participating in other activities while on your Treadmill; such as watching television, reading, etc. These distractions may cause you to lose balance which may result in serious injury.
- Do not use excessive pressure on console control buttons. They are precision-set to function properly with little finger pressure.

WARNING

This product can expose you to chemicals including Toluene and Acrylamide which are known to the State of California to cause Cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov

RECORD YOUR SERIAL NUMBER

Please record the serial number of this fitness product in the space provided below. The serial number is located at the front of the treadmill by the Power switch.

SERIAL NUMBER: _____

REGISTER YOUR PURCHASE

The self-addressed product registration card must be completed in full and returned to Spirit Fitness. You can also go to www.spiritfitness.com/commercialwarrantyregistration.html under the Support tab to register online.

CT900 PRE-ASSEMBLY

UNPACKING

1. Cut the straps and open box.
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.

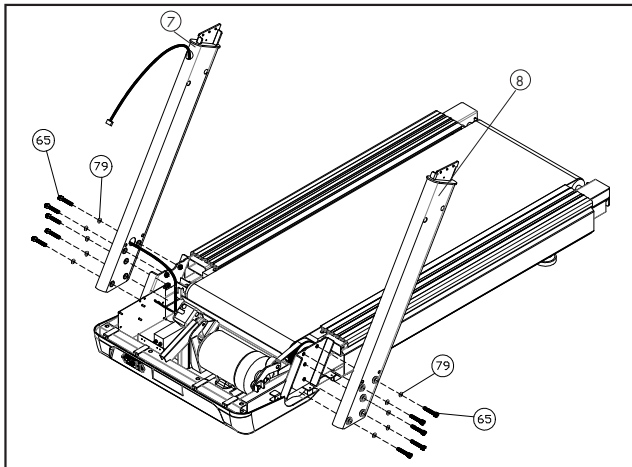
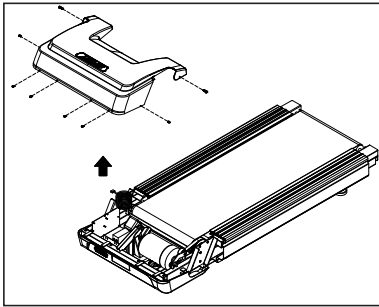
TOOLS INCLUDED:

- ❑ 8mm Allen Wrench
- ❑ 2 Phillips Screwdrivers

PARTS INCLUDED:

- ❑ 1 Main Frame
- ❑ 2 Uprights
- ❑ 1 Main Panel
- ❑ 1 Console
- ❑ 1 Console Bracket Cover
- ❑ 4 Handrail Covers
- ❑ 2 Upright Covers
- ❑ 2 End Caps

CT900 STEP ONE

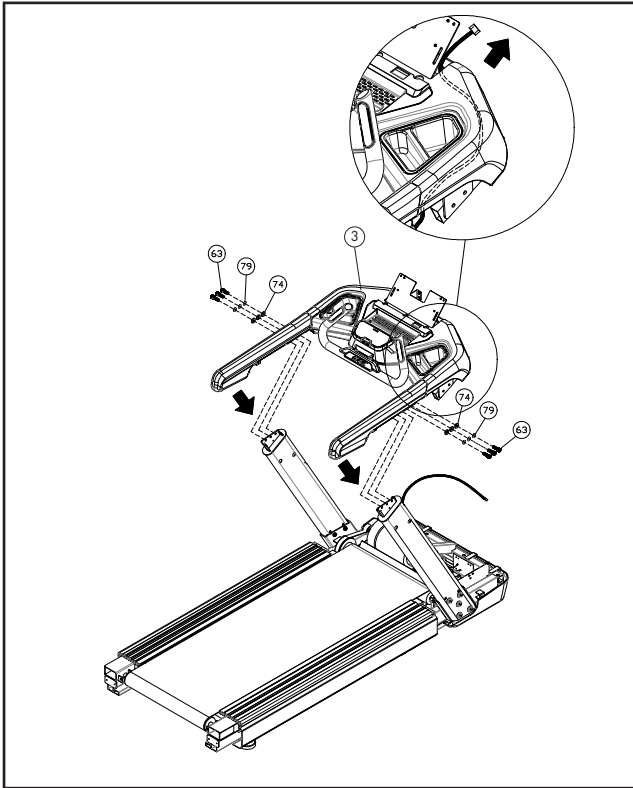


HARDWARE FOR STEP 1

PART	TYPE	DESCRIPTION	QTY
65	BOLT	M10XP1.5X60L	10
79	LOCK WASHER	Ø10	10

1. Loosen the 8 screws holding the **MOTOR COVER (37)** in place and remove the cover.
2. Uncoil wiring harness and run wires through the **RIGHT UPRIGHT (7)**.
3. Use 5 **BOLTS (65)** and 5 **LOCK WASHERS (79)** to attach the **RIGHT UPRIGHT (7)** to the **MAIN FRAME (1)**. Do not pinch wires. Do not tighten before putting the console on.
4. Use 5 **BOLTS (65)** and 5 **LOCK WASHERS (79)** to attach the **LEFT UPRIGHT (8)** to the **MAIN FRAME (1)**. Do not tighten before putting the console on.

CT900 STEP TWO

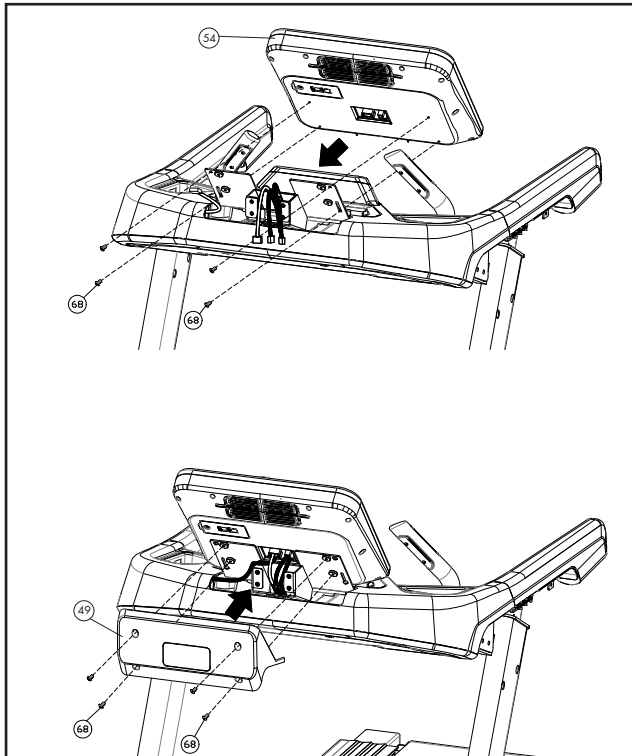


HARDWARE FOR STEP 2

PART	TYPE	DESCRIPTION	QTY
63	BOLT	M10XP1.5X 35L	6
74	FLAT WASHER	Ø3/8"X Ø25X3T	6
79	LOCK WASHER	Ø10	6

1. Install **MAIN PANEL (3)** onto the uprights using 6 **BOLTS (63)**, 6 **LOCK WASHERS (79)** and 6 **FLAT WASHERS (74)**.
2. Run the wiring harness through the **MAIN PANEL (3)** as shown in the illustration.
3. Tighten all bolts and washers on both uprights (7 and 8) from previous step.

CT900 STEP THREE

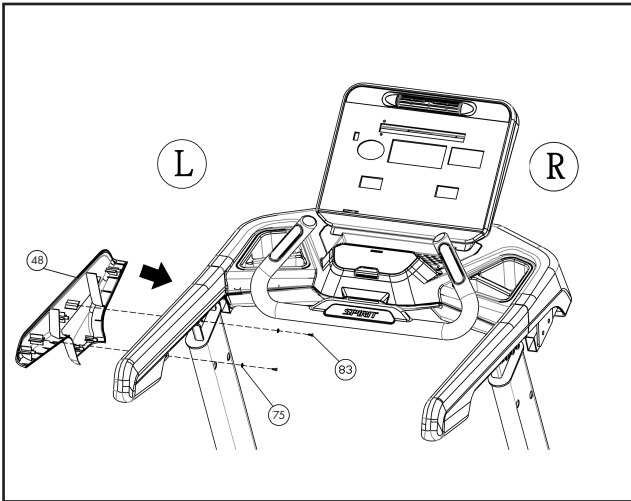


HARDWARE FOR STEP 3

PART	TYPE	DESCRIPTION	QTY
68	BOLT	M5XPO.8X12L	8

1. Wires should be away from the console mounting bracket.
2. Install the **CONSOLE (54)** using 4 **BOLTS (68)**.
3. Connect wiring harness to **CONSOLE (54)**.
4. Attach **CONSOLE BRACKET COVER (49)** to **MAIN PANEL** using 4 **BOLTS (68)**.

CT900 STEP FOUR

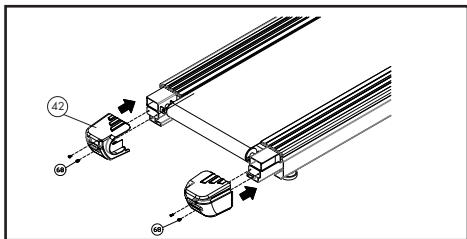
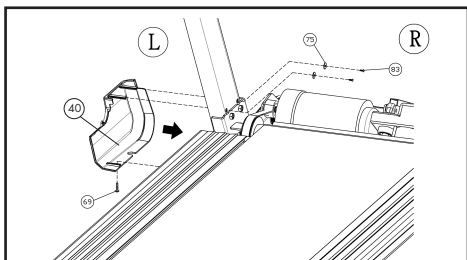
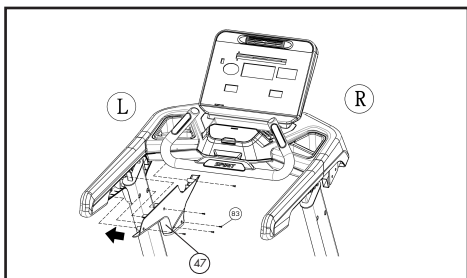


HARDWARE FOR STEP 4

PART	TYPE	DESCRIPTION	QTY
68	SCREW	M5XPO.8X12L	4
69	SCREW	M5XPO.8X25L	2
75	FLAT WASHER	Ø5.5XØ19X1.5T	4
83	SCREW	Ø3.5X12L	18

1. Attach **LEFT OUTER HANDRAIL COVER (48)** to **MAIN PANEL** using 2 **SCREWS (83)** and 2 **FLAT WASHERS (75)**.

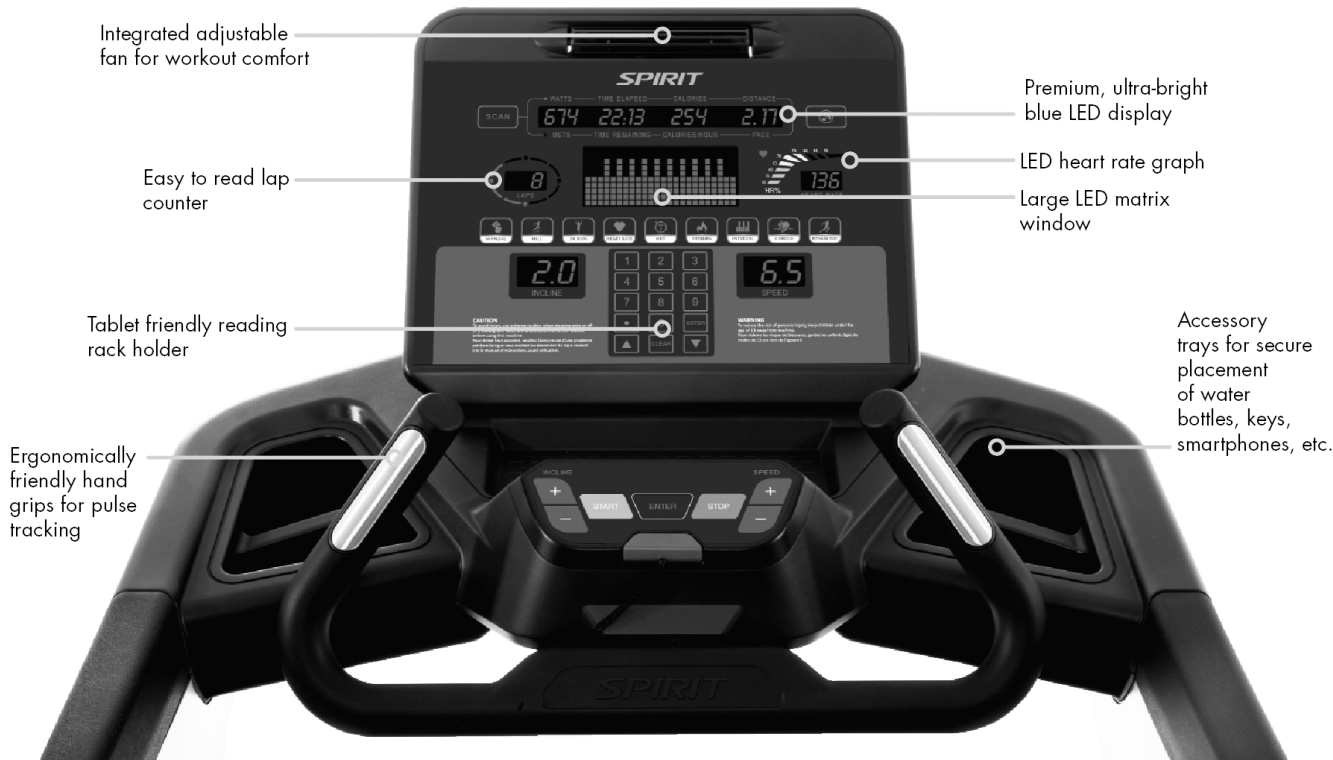
CT900 STEP FOUR



2. Attach **LEFT INNER HANDRAIL COVER (47)** to **MAIN PANEL** using **5 SCREWS (83)**.
3. Attach **LEFT LOWER UPRIGHT COVER (40)** to **MAIN FRAME (1)** using **2 SCREWS (83)**, **2 FLAT WASHERS (75)**, and **1 long SCREW (69)**.
4. Attach **LEFT END CAP (42)** to **MAIN FRAME (1)** using **2 SCREWS (68)**.
5. Repeat to install right side covers (**45, 46, 39, 41**).
6. Reinstall the **MOTOR COVER (37)** using the bolts removed in Step 1.



CT900 CONSOLE OPERATION



Integrated adjustable fan for workout comfort

Easy to read lap counter

Tablet friendly reading rack holder

Ergonomically friendly hand grips for pulse tracking

Premium, ultra-bright blue LED display

LED heart rate graph

Large LED matrix window

Accessory trays for secure placement of water bottles, keys, smartphones, etc.

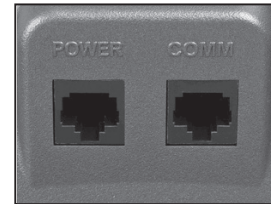
POWER

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 switch is turned on the treadmill console will take around 10 seconds to power on. The console will then enter idle mode, which is the starting point for operation.

C-SAFE FEATURE

Your console is equipped with a C-SAFE feature. The Power (POWER) port can be used for powering a remote controlled audio-visual system by connecting a cable from the remote to the Power port at the back of the console. The Communication port (COMM) can be used to interact with fitness software applications.



QUICK START

- Press any button to wake display up if not already on.
- Press the **Start** button to begin belt movement at 0.5 mph then adjust to the desired speed using the **Speed +/-** buttons, or by typing the desired speed on the numeric keypad. Once setting desired is selected press **Enter**.
- To stop the treadmill press and release **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 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 three 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 any time after the belt starts moving.
- Press and hold the adjustment **Incline +/- buttons** to achieve desired level of 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. 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 window 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.

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 any time the computer is receiving a Grip Pulse signal. You may use the Grip Pulse feature while in Heart Rate Control. The CT900 will also pick up wireless heart rate transmitters that are Polar compatible, including coded transmissions.

HEART RATE BAR GRAPH

Displays a graphical representation of your heart rate as a percentage of your estimated maximum heart rate. When you enter your age during programming, the console will calculate your maximum heart rate then light up the graph to show the percent of estimated maximum heart rate you are currently achieving.

MESSAGE WINDOW DISPLAY

Displays messages that help guide you through the programming process. During a program the message window displays your workout data.

PROGRAMMABLE FEATURES

The Spirit Fitness CT900 offers a variety of exercise program options to choose from: **Manual, Four Preset Programs (Hill, Fat Burn, Cardio, Interval), 5K Run, Heart Rate Control, High Intensity Interval Training (HIIT), and Nine Fitness Testing Protocols: Gerkin, WFI, Army (pft), Navy (prt), Air Force (prt), Marines (pft), Law Enforcement (peb), U.S. Coast Guard and U.K. Chester Fireman (Performance & Prediction protocols).**

To Select and Start a Preset Program:

1. Select a preset program button then press Enter 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 **Message window** will prompt you through the settings starting with time. The default value of 20 minutes will be displayed and you may press Enter to accept or change it using the buttonpad or **Up / Down buttons** and just press enter to move to the next step
3. The **Message Window** will now be blinking 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 the buttonpad or **Up / Down buttons** to adjust, and then press enter.
4. The **Message Window** will now be blinking a value indicating your Bodyweight. Entering your correct bodyweight affects the Calorie readout accuracy. Use the buttonpad or **Up / Down buttons** to adjust, and then press Enter.
5. The **Message Window** will now be blinking, showing the preset top speed of the selected program. Use the buttonpad or **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 three minutes.

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.

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	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	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	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

HIIT PROGRAM

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. Press the **HIIT button** then **Enter**. The **Message Window** will ask you to enter your **Age**. You may enter your **Age**, using the **Up and Down buttons** or the numeric button pad, 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 **Weight**. You may adjust the **Weight** number using the **Up and Down buttons** or the numeric button pad 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 is entering the Interval time. The **Message Window** shows: Sprint :30 | Rest :30. The Sprint time will be blinking. You may use the + - buttons 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 + - buttons and press **Enter**. The **Message Window** will display the total program time.
5. The **Message Window** now displays **SPRINT SPD 6.0 MPH**. Use the **Up and Down buttons** to adjust the sprint speed you desire and press enter.
6. The **Message Window** now displays **REST SPEED 3.0 MPH**. Use the **Up and Down buttons** to adjust the rest 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.

5K RUN

This program automatically sets a 5K distance as your goal. The track display will show one loop that is the equivalent of 5 kilometers and the **Distance** window will also show 5K 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 DM displays: **GERKIN**. This is the first of 9 different tests available: **Gerkin, WFI, Army (pft), Navy (prt), Air Force (prt), Marines (pft), Law Enforcement (peb), U.S. Coast Guard, and U.K. Chester Fireman (Performance & Prediction protocols)**. The initial test is **GERKIN**; to select a different test press the **Fitness Test** button again and the next test will be shown. Continue to press the **Fitness Test** button until the test you want is shown in the message window. To select your desired fitness test, press **Enter**.

FIT TEST OPERATION

1. For each program the Message Window will prompt you to enter your personal data such as **Age, Weight, Height, Gender**. You may adjust the settings using the keypad or **Up and Down** buttons then press the **Enter** button to accept the new number and proceed on to the next screen.
2. After all required data is entered you may 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
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 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>

COAST GUARD

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

Male	20-29 Yrs. Old	30-39 Yrs. Old	40-49 Yrs. Old	50-59 Yrs. Old	60+ Yrs. Old
Superior	<9:17	<9:33	<9:51	<10:37	<11:26
Excellent	9:18-10:09	9:34-10:46	9:52-11:15	10:28-12:08	11:27-13:23
Good	10:10-11:29	10:47-11:54	11:16-12:24	12:09-13:35	13:24-15:04
Fair	11:30-12:38	11:55-12:58	12:25-13:50	13:36-15:06	15:05-16:46
Poor	12:39-14:00	12:59-14:34	13:51-15:24	15:07-16:58	16:47-19:10
Very Poor	>14:00	>14:34	>15:24	>16:58	>19:10
Failure	>12:51	>13:36	>14:29	>15:26	>16:40
Female	20-29 Yrs. Old	30-39 Yrs. Old	40-49 Yrs. Old	50-59 Yrs. Old	60+ Yrs. Old
Superior	<10:28	<11:00	<11:33	<12:53	<14:05
Excellent	10:29-11:58	11:01-12:24	11:34-13:23	12:54-14:34	14:06-16:33
Good	11:59-13:24	12:25-14:08	13:24-14:53	14:35-16:35	16:34-18:27
Fair	13:25-14:50	14:09-15:43	14:54-16:31	16:36-18:18	18:28-20:16
Poor	14:51-16:46	15:44-17:38	16:32-18:37	18:19-20:44	20:17-22:52
Very Poor	>16:46	>17:38	>18:37	>20:44	>22:52
Failure	>15:26	>15:57	>16:58	>17:55	>18:44

LAW ENFORCEMENT (PEB)

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

For more detailed information, visit: <https://www.fletc.gov/peb-scores-age-and-gender>

GERKIN

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

WFI

The **WFI** test is a modified **Gerkin** protocol. The actual test is the same as the **Gerkin** chart above, but the score is calculated differently.

Before the Gerkin/WFI Test:

1. 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.
2. Make sure you have warmed up and stretched before taking the test.
3. Do not take in caffeine before the test.
4. Hold the hand grips gently, do not tense up.

During the Test:

1. 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.
2. The test will start with a 3-minute warm-up at 3 MPH before the actual test begins.
3. 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:

1. Cool down for about one to three minutes.
2. 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 DECONDITIONED 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

CHESTER TREADMILL TEST

This test has two modes: CTT Performance and CTT Prediction (of Aerobic Capacity).

CTT PERFORMANCE

CTT Performance is a 12-minute graded, treadmill walk test with a fixed speed of 6.2km/hr designed to assess whether or not the subject can achieve the minimum recommended standard for aerobic capacity, namely 42mlsO₂/kg/min.

Procedures:

1. Check there are no medical contraindications to performing exhaustive exercise
2. Subject walks at 6.2km/hr at 0% for 2 mins
3. Every 2 mins increase gradient by 3%
4. Test is completed after 12 mins
5. Test should be stopped if subject is showing overt signs of distress and exhaustion or RPE=18+

CTT PREDICTION

CTT Prediction is a submaximal test designed to predict aerobic capacity

1. Same walk protocol as CTT Performance but wearing HR monitor
2. Test is stopped when the subject reaches 80%HRMax or RPE=14
3. A VO₂ score is given at the end of the test

HEART RATE PROGRAM

Heart Rate Control (HRC) uses your treadmill's incline system to control your heart rate via information from pulse grips or wireless chest strap. 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. Press **HR button** to enter heart rate program.
2. Now the window 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 program.
3. When the Enter button is pressed, the **Message Window** shows **PRESS 1 OR 2 TO SELECT THEN PRESS ENTER**. At the same time, the dot matrix window is showing "1" and you can press numeric buttonpad 1 or 2 and then the **Enter** button.
4. Now Message Window is showing **ADJUST TIME THEN PRESS ENTER** with **Time Window** blinking. Use **Up/Down buttons** or numeric buttons to adjust. After setting time, press the Enter button again.
5. Now **Message Window** is showing **ADJUST AGE THEN PRESS ENTER** with **Incline Window** blinking. Use **Up/Down/ Fast/Slow buttons** or numeric buttons to adjust. Adjusting age will change HR value (as the HR formula described previously). After age is set, press the **Enter** button again.
6. Now **Message Window** is showing **ADJUST BODY WEIGHT THEN PRESS ENTER** with **Incline Window** blinking. Use **Up/Down buttons** or numeric buttons to adjust. After the weight is set, press **Enter** button again.

7. Now **Message Window** is showing **ADJUST HEART RATE THEN PRESS ENTER** with **Speed Window** blinking. Use **Up/Down buttons** or numeric buttons to adjust. After the target heart rate value is set, press the **Enter** button again.
8. The **Message Window** is then showing **PRESS START TO BEGIN WORKOUT OR ENTER TO MODIFY**. Press **Start button** to begin the workout or **Stop** button to return to the previous screen.

NOTE: When the Message Window is showing CHECK PULSE, there is no pulse signal received and the program cannot be performed. Please check and make sure that heart rate strap functions normally.

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 treadmill. Pulling this safety tether cord will stop treadmill 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.

BELT/DECK

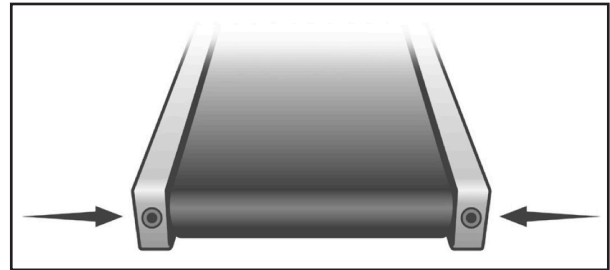
Your treadmill uses a very high-efficient, low-friction hard waxed deck. Performance is maximized when the deck is kept as clean as possible. Use a soft, damp cloth, or paper towel, wipe the edge of the belt and the area between the belt edge and the frame. Also reach as far as practical directly under 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

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 treadbelt 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 OVER TIGHTEN – 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.

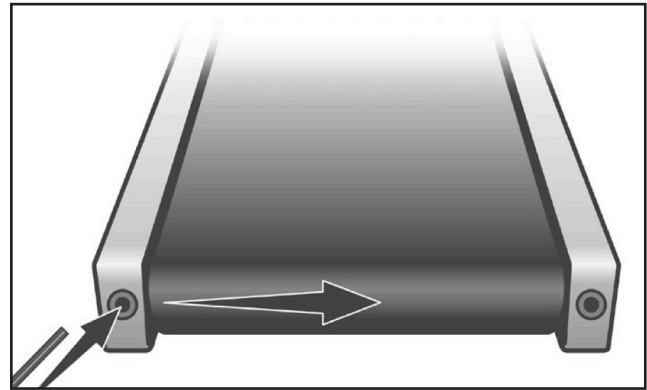
TREADBELT TRACKING ADJUSTMENT

The treadmill is designed so that the treadbelt 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 TREADBELT TRACKING

An 8mm Allen wrench is provided for this adjustment. Make tracking adjustments on the left side bolt. Set the belt speed to 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 treadbelt. Adjustments will become less of a maintenance concern as the belt is used. Proper belt tracking is an owner responsibility common with all treadmills.



TROUBLESHOOTING

PROBLEM	CAUSE
Display does not light	<ol style="list-style-type: none"> 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 115 VAC wall outlet. 4. Breaker panel circuit breaker may be tripped.
Treadbelt does not stay centered Treadmill belt hesitates when walked/run on	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. See General Maintenance section on Tread- belt Tension. Adjust as necessary.
Motor is not responsive after pressing start	1. Reset power. If still no good contact service.
Circuit breaker trips, but not the treadmill circuit breaker	Need to replace the breaker with a "High In-rush current" type breaker (see page 4 for details)
Treadmill will only achieve approximately 7 mph but shows higher speed on display	This indicates motor should be receiving power to operate. Do not use an extension cord. If an extension cord is required, it should be as short as possible and heavy duty, 16-gauge minimum, low voltage. Contact an electrician or your Spirit Fitness dealer. A minimum of 110-volt AC current is required.
Treadbelt stops quickly/suddenly when tether cord is pulled	High belt/deck friction. See General Maintenance section on cleaning the deck. If cleaning doesn't prevent this from reoccurring, check to see if there is significant wear of the deck. If so, the deck may need to be flipped if it is on its original side.
Treadmill trip 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 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.

GENERAL MAINTENANCE

Unplug treadmill before performing any 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				•	

TREADMILL WARRANTY EFFECTIVE JANUARY 1, 2017

Spirit Fitness warrants all its treadmill parts for a period of time listed below from the date of sale, as determined by sale receipt, or in the absence of a sales receipt eighteen (18) months from the original factory shipping date. Spirit Fitness' responsibilities include providing new or remanufactured parts, at Spirit Fitness' 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 Spirit Fitness directly to a consumer. The warranty period applies to the following components:

WARRANTY	FRAME	DRIVE MOTOR	PARTS	LABOR
Commercial	Lifetime	10 Years	3 Year	3 Years

NORMAL RESPONSIBILITIES OF THE FACILITY

The facility is responsible for the items listed below:

1. The warranty registration card must be completed and returned to the address listed on the card within 10 days of the original purchase, or completed online to validate the manufacturer's limited warranty.
2. Proper use of the fitness equipment in accordance with the instructions provided in this manual
3. Proper installation in accordance with instructions provided with the fitness equipment and with all local electric codes.
4. Proper connection to a grounded power supply of sufficient voltage, replacement of blown fuses, repair of loose connections or defects in house or facility wiring.
5. Expenses for making the fitness equipment accessible for servicing, including any item that was not part of the fitness equipment at the time it was shipped from the factory.
6. Damages to the fitness equipment finish during shipping, installation or following installation.
7. Routine maintenance of this unit as specified in this manual.

EXCLUSIONS

This warranty does not cover the following:

1. CONSEQUENTIAL, COLLATERAL, OR INCIDENTAL DAMAGES SUCH AS PROPERTY DAMAGE AND INCIDENTAL EXPENSES RESULTING FROM ANY BREACH OF THIS WRITTEN OR ANY IMPLIED WARRANTY.
NOTE: Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.
2. Service call reimbursement to the consumer. Service call reimbursement to the dealer that does not involve malfunction or defects in workmanship or material, for units that are beyond the warranty period, for units that are beyond the service call reimbursement period, for fitness equipment not requiring component replacement, or fitness equipment not in non-dues paying facility or household use.
3. Damages caused by services performed by persons other than authorized Spirit Fitness service companies; use of parts other than original Spirit Fitness parts; or external causes such as corrosion, discoloration of paint or plastic, alterations, modifications, abuse, misuse, accident, improper maintenance, inadequate power supply, or acts of God.
4. Products with original serial numbers that have been removed or altered.
5. Products that have been: sold, transferred, bartered, or given to a third party.
6. Products that do not have a warranty registration card on file at Spirit Fitness. Spirit Fitness reserves the right to request proof of purchase if no warranty record exists for the product.
7. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE.
8. Product used in prisons and correctional facilities

Warranties outside of the United States may vary. Please contact your local dealer for details.

SERVICE

Keep your bill of sale. Twelve (12) months from the date on the bill of sale or eighteen (18) months from the date of factory shipping as determined by the serial number establishes the labor warranty period should service be required. If service is performed, it is in your best interest to obtain and keep all receipts. This written warranty gives you specific legal rights. You may also have other rights that vary from state to state. Service under this warranty must be obtained by following these steps, in order:

1. Contact your selling authorized Spirit Fitness dealer. OR
2. Contact your local authorized Spirit Fitness service organization.
3. If there is a question as to where to obtain service, contact our service department at (870) 935-1107.
4. Spirit Fitness' obligation under this warranty is limited to repairing or replacing, at Spirit Fitness' option, the product through one of our authorized service centers. All repairs must be preauthorized by Spirit Fitness.
5. The owner is responsible for adequate packaging upon return to Spirit Fitness. Spirit Fitness is not responsible for damages in shipping. Make all freight damage claims with the appropriate freight carrier. **DO NOT SHIP ANY UNIT TO OUR FACTORY WITHOUT A RETURN AUTHORIZATION NUMBER.** All units arriving without a return authorization number will be refused.
6. For any further information, or to contact our service department by mail, send your correspondence to:

SPIRIT FITNESS, INC.
P.O. Box 2037
Jonesboro, AR 72402-2037

Product features or specifications as described or illustrated are subject to change without notice. All warranties are made by Spirit Manufacturing, Inc. This warranty applies only in the 48 contiguous United States. NOTE: This does not apply to Alaska or Hawaii.



800.258.4555
spiritservice@spiritfitness.com
www.spiritfitness.com



Spirit Fitness
3000 Nestle Road
Jonesboro, AR 72401



CT900 Owners Manual
© 2018 All Rights Reserved
Revision: 08.05.2018