

Operation of Your Treadmill

Getting familiar with the control panel

■ Z100 / Z300 Console



■ Z500 / 7300 Console



Getting started:

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 key is installed, as the treadmill will not power on without it.

When the power is turned on, all the lights on the display will light for a short time. Then the **Time** and **Distance** windows will display Odometer readings for a short time. The **Time** window will show how many hours the treadmill has been in use and the **Distance** window will show how many miles (or Kilometers if the treadmill is set to metric readings) the treadmill has gone. Then a message will scroll across the message window (Z500/Z700) or the dot matrix (Z100/Z300) showing the current software version. The treadmill will then enter idle mode, which is the starting point for operation.

Quick-Start Operation:

STEP 1: Press and release the **Start** key to wake display up (if not already on).

Note: Installing the tether key will also wake up the console.

STEP 2: Press and release the **Start** key to **begin belt movement**, at .5 mph, then adjust to the desired speed using the **Fast / Slow** keys (console or hand rail). You may also use the rapid speed keys 2 through 12 to adjust the speed.

STEP 3: To slow tread-belt press and hold the **Slow** key (console or hand rail) to the desired speed. You may also press the rapid speed adjust keys, 2 through 12.

STEP 4: To stop the tread-belt press and release red **Stop** key.

Pause/Stop/Reset Feature:

STEP 1: When the treadmill is running the pause feature may be utilized by pressing the red **Stop** key once. This will slowly decelerate the tread-belt to a stop. The incline will go to zero percent. The Time, Distance and Calorie readings will hold while the unit is in the pause mode. After 5 minutes the display will reset and return to the start up screen.

STEP 2: To resume your exercise, when in Pause mode, press the **Start** key. The speed and incline will return to their previous settings.

- Pause is executed when the **Stop** button is pressed once. If the **Stop** key is pressed a second time, the program will end and a workout summary will be displayed. If the **Stop** button is pressed a third time, the console will return to the idle mode (start up) screen. If the **Stop** button is held down for more than 3 seconds the console will reset.

Incline Feature:

- Incline may be adjusted anytime after belt movement.
- Press and hold the **Adjust** ▲ ▼ keys (console or hand rail) to achieve desired level of effort. You may also choose a more rapid increase / decrease by selecting desired key, 2 through 12, on left hand side of console (incline).
- The display will indicate incline percent as adjustments are made.
- Incline will remain in it's position when display is turned off.

Dot Matrix Center Display (Manual Operation):

Twenty rows of Red (Tri-color on Z500/Z700) "dots"(8 high) indicate each segment of a workout. 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.

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

1/4 Mile Track*:

The 1/4 mile track will be displayed around the dot matrix window. The flashing dot indicates your progress. Once the 1/4 mile is complete this feature will begin again.

Pulse Grip Feature:

The Pulse (Heart Rate) console window will display your current heart rate in beats per minute during the workout. You must use both stainless steel sensors on the front cross bar to display your pulse. Pulse value displays anytime the upper display is receiving a Grip Pulse signal. You may not use the Grip Pulse feature while in Heart Rate Control.

Note: Refer to Important Safety Instructions (page 2) concerning Pulse Grip operation.

Calorie Display:

Displays the cumulative calories burned at any given time during your workout.

Note: This is only a rough guide used for comparison of different exercise sessions, which cannot be used for medical purposes.

Speakers:

The console has a built-in Speakers. You may Plug an Audio Source (CD player, MP3, Computer, etc.) into the Jack on the Left side of console.

There is no volume control on console, volume must be controlled by Audio Source.

To Turn Treadmill Off (Blank out Display):

Two methods accomplish this: Use either one.

(1) Display will automatically turn off (blank out) after 30 minutes (no key operations) in Pause / Stop mode.

(2) Remove tether cord.

Programmable Features

The Z Series offers 7, factory preset programs, 2 user defined programs and one Manual program.

Each preset program has a maximum speed level that is displayed when a desired workout is chosen. The maximum speed that the particular program will achieve will be displayed in the Speed window.

Also included are two user programs (User 1 and User 2) for custom workouts.

To Select a Program:

STEP 1: Press the desired **PROGRAM** key. Press enter to select the program. The display will prompt you through the programming or you can just press Start to begin the program with default values.

STEP 2: If enter was pressed, the **Time** window will blink with the default value of 20 minutes. You may use any of the up/down keys to adjust the time. After adjusting, or to accept the default, press enter. (Note: You may press start at any time during the programming to start the program.)

STEP 3: The **Calorie** window will now be blinking a value, which is your **Body Weight**. Entering the correct body weight will affect the calorie count. Use the Up/Down keys to adjust, then press enter.

A note about the **Calorie** display: No exercise machine can give you an exact calorie count because there are too many factors which determine exact calorie burn for a particular person. Even if someone is the exact same body weight, age and height, their calorie burn may be very different than yours. The **Calorie** display is to be used as a reference only to monitor improvement from workout to workout.

STEP 4: The **Heart Rate** window will now be blinking a value, which is your **Age**. Entering your correct age affects the heart rate **Bar Graph Display (Z500/Z700 only)** and the **Heart Rate Control** programs. Use the Up/Down keys to adjust, then press enter.

Your age determines the maximum heart rate you may achieve. Since the Bar Graph Display and the Heart Rate control features are based on a percentage of your maximum heart rate, it is important to enter the correct age for these features to work properly.

STEP 5: The **Speed** window will now be blinking the preset top speed of the selected program. Use the Up/Down keys to adjust, then press enter. Each program has various speed changes through out, this allows you to limit the highest speed the program can reach.

User Programs:

STEP 1: Select User 1 or User 2 via the **PROGRAM** key then press **Enter**. Note that the dot matrix display portion will have a single row of dots at the bottom (Unless there is a previously stored program).

STEP 2: Note the clock (Time) window is flashing. Use the **Adjust ▲ ▼** keys to adjust up from 10 minutes (if desired). Press **ENTER** key. This is a must to continue even if time is not adjusted.

STEP 3: The Calorie window will now be blinking a bodyweight value. Enter your bodyweight and press **Enter**.

STEP 4: The Pulse window will now be blinking an Age value. Adjust the age and press enter.

STEP 5: The first column (segment) will now be blinking. Using the **Fast / Slow** keys, adjust the speed level to your desired effort for the first segment then press enter. The second column will now be blinking. Repeat the above process until all segments have been programmed. The first column will be blinking again. This is for the incline programming. Repeat the above process to program all segments for incline.

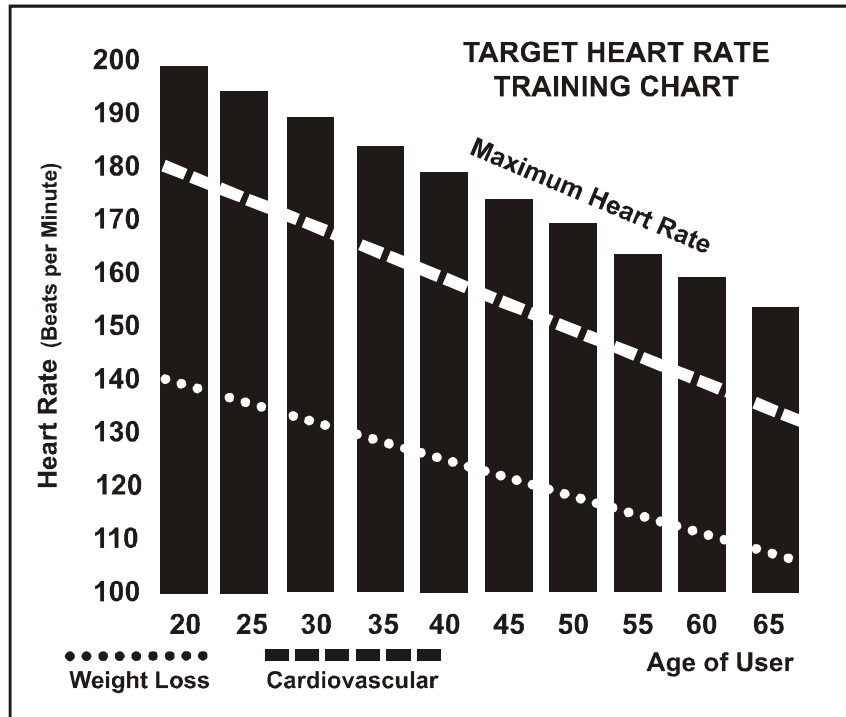
STEP 6: Press the **Start** button to begin the workout and also save the program to memory.

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: $220 - \text{User's Age} = \text{Maximum Heart Rate}$. If you enter your age during programming of the console the console will perform this calculation automatically. This is used for the HR control programs and also for the Heart rate bar graph (Z500/Z700 only) After calculating your Maximum Heart Rate, you can decide upon which goal you would like to pursue. The two most popular reasons for, or goals of exercise, are cardiovascular fitness (training for the heart and lungs) and weight control.



The black columns on the chart above represent the Maximum Heart Rate for a person whose age is listed at the bottom of each column. The training heart rate, for either cardiovascular fitness or weight loss, is represented by two different lines that cut diagonally through the chart. A definition of the lines' goal is in the bottom left-hand corner of the chart. If your goal is cardiovascular fitness or if it is weight loss, it can be achieved by training at 90% or 70%, respectively, of your Maximum Heart Rate on a schedule approved by your physician. Consult your physician before participating in any exercise program.

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

CAUTION!

The target value used in H-1 and H-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.

Using a Heart Rate Transmitter

How to wear your wireless chest strap transmitter:

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

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

Erratic Operation:

Caution! Do not use this treadmill for Heart Rate Control unless a steady, solid Actual Heart Rate value is being displayed. High, wild, random numbers being displayed indicate a problem.

Areas to look for on interference:

- (1) Treadmill not properly grounded - **A must!**
- (2) Microwave ovens, T.V.'s, small appliances, etc.
- (3) Fluorescent lights.
- (4) Some household security systems.
- (5) Perimeter fence for a pet.
- (6) Loose treadmill console / upright.

WARNING!

DO NOT USE THE HEART RATE CONTROL PROGRAM IF YOUR HEART RATE IS NOT REGISTERING PROPERLY ON THE TREADMILL'S DISPLAY!

Special Operations of Heart Rate Functions:

All Spirit treadmills that are factory equipped with a Heart Rate Control system have many distinct features both in the Heart Rate Control program and during heart rate monitoring. This section will give you a more detailed background to use your treadmill in the most effective manner.

How the Heart Rate Control Program Works:

Heart Rate Control 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. Additionally, changes in incline keep you in control of the machine's speed instead of the machine controlling you.

Selecting a Heart Rate Control Program:

You have the option, during the setup mode, to choose either the Weight Control (H-1) program or the Cardiovascular (H-2) program. Weight Control attempts to maintain your heart rate at 70% of your Maximum Heart Rate. Cardiovascular attempts to maintain your heart rate at 90% of your Maximum Heart Rate. Your Maximum Heart Rate is based upon a formula that subtracts your age from 220. Your age input is performed during the setup mode.

CAUTION!

The target value used in H-1 and H-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.

Heart Rate Control

CAUTION!

Intended for wireless transmitter chest strap only. Do not use Pulse Grip bar for Heart Rate Control. You must receive a strong / steady value in heart rate window.

STEP 1: Press HR1 or HR2 button.

STEP 2: The Pulse window will be blinking, showing the default HR for this program. You may adjust it and press enter if you want or just press enter to accept the default value.

STEP 3: The Calorie will now be blinking showing bodyweight. Adjust and press enter or press enter to accept default.

STEP 4: The Pulse window will now be blinking showing age. Adjust and press enter or press enter to accept default.

STEP 5: The Time window will now be blinking. Adjust the time and press enter.

STEP 6: Press Start to begin program.

General Maintenance

Belt and Bed - Your treadmill uses a very high-efficient low-friction bed. Performance is maximized when the bed is kept as clean as possible. Use a soft, damp cloth or paper towel to wipe the edge of the belt and the area between the belt edge and frame. Also reach as far as practical directly under the belt edge. This should be done once a month to extend belt and bed life. Use water only - no cleaners or abrasives. A mild soap and water solution along with a nylon scrub brush will clean the top of the textured belt.

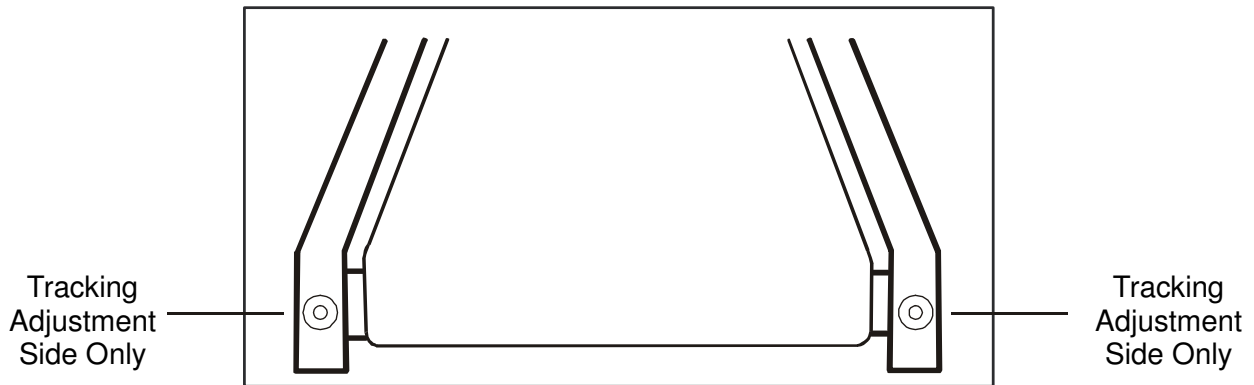
Allow to dry before using.

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

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

BELT ADJUSTMENTS:

Treadbelt Tension Adjustment - Belt tension is not critical for most users. It is very important for joggers and runners in order to provide a smooth, steady running surface. Adjustment must be made from the right side of the rear roller in order to adjust tension with the 6 mm Allen wrench provided in the parts package. The adjustment bolt is located at the end of the right side rail as noted in diagram below.



Note: Adjustment is thru small hole of end cap.

Tighten the rear roller only enough to prevent slippage at the front roller. Turn the treadbelt tension adjusting bolt in increments of 1/4 turn and inspect for proper tension.

When an adjustment is made to the belt tension, you must also make a tracking adjustment to compensate for the change in belt tension. This is accomplished by turning both the tension and tracking Allen bolts an equal amount. This adjustment should be made by turning both bolts clockwise by no more than a 1/4 turn at a time.

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

TREADBELT TRACKING ADJUSTMENT:

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

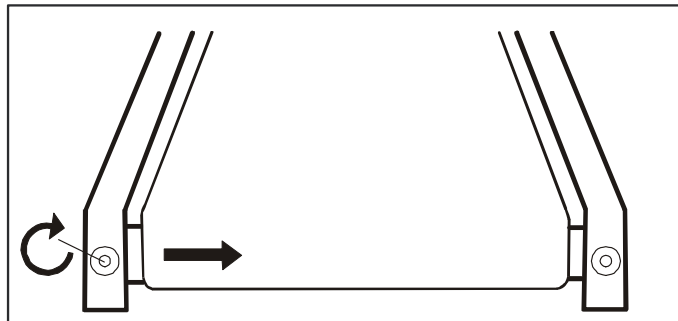
The treadmill is designed to keep the treadbelt reasonably centered while in use. It is normal for some belts to drift near one side while the belt is running with no one on it. After a few minutes of use, the treadbelt should have a tendency to center itself. If, during use, the belt continues to move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

TO SET TREADBELT TRACKING:

A 6 mm Allen wrench is provided to adjust the rear roller. Make tracking adjustments from the **left** side only. Set belt speed at approximately 2 to 3 mph.

A small adjustment can make a dramatic difference. Turn the bolt only a 1/4 turn 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. The belt may require periodic tracking adjustment depending on use and

walking/running characteristics. Some users will affect tracking differently. Expect to make adjustments as required to center the 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.



ATTENTION:

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

BELT / DECK LUBRICATION:

Do not re-lube with other than Spirit lubricant. Spirit provides one application with this unit. See your Spirit dealer for additional purchases. The use of some other lubricants may destroy the deck surface or belt and will void warranty. Conditions exist beyond Spirit's control on belt / deck cleanliness which relates to friction.

You should apply the enclosed belt lubrication after approximately the first 50 hours of operation. Use all the contents of one container (no more) and spread lubricant onto middle portion (away from edges) of the deck (under treadbelt) along its **width**. When walked on, the belt will make certain an even coat is applied. Lubricant is not harmful to the skin. Lube will be distributed properly by walking at 2 to 3 mph for 3 to 5 minutes on all areas of the belt. Use handrails for support. The first few minutes you will be polishing your deck and lubricating the belt backing. **Do not run on a newly lubricated belt until the above break-in procedure is done.** If the treadmill belt/deck is kept reasonably clean it is possible to expect over 1000 hours before additional re-lubing is necessary.

CAUTION - KEEP HANDS CLEAR OF MOVING REAR PULLEY!

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	Tether cord not in position. Circuit breaker on front grill tripped. Push circuit breaker in until it locks. Plug is disconnected. Make sure plug is firmly pushed into AC household wall outlet. Household circuit breaker may be tripped. Treadmill defect. Contact your Spirit dealer.
Treadbelt does not stay centered Treadmill belt hesitates when walked/run on	A 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 Treadbelt Tension. Adjust as necessary.
Motor is not responsive / Display is lit	Make certain clock is running.
Treadmill will only achieve approximately 7 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 16 gauge minimum. Low household voltage. Contact an electrician or your Spirit 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 lubrication.
Treadmill trips on board 15 amp circuit	High belt/deck friction. See General Maintenance
Computer shuts off when console is touched (on a cold day)while walking/running	Treadmill is not grounded. Static electricity is "crashing" the computer. Refer to Grounding Instructions on page 4.

Manufacturer's Limited Warranty

Effective October 15, 2004

TREADMILL WARRANTY

Spirit Manufacturing Inc. warrants all its treadmills' parts for a period of 5 years from the date of retail sale, as determined by sale receipt, or eighteen (18) months from the original factory shipping date, whichever comes first. Spirit's responsibilities include providing new or remanufactured parts, at Spirit'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 Spirit directly to a consumer. An extended warranty period applies to the following components:

Drive Motor	30 Years
Deck Wear	5 Years
Electronics / Belt / Rollers	5 Years
Frame Weldments	Lifetime
All Other Components	5 Years

NORMAL RESPONSIBILITIES OF THE CONSUMER

This warranty applies only to products in ordinary household use, and the consumer 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 to validate the manufacturer's limited warranty.
2. Proper use of the treadmill in accordance with the instructions provided in this manual, including belt tracking.
3. Proper installation by an authorized Spirit service company in accordance with instructions provided with the treadmill 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 wiring.
5. Expenses for making the treadmill accessible for servicing, including any item that was not part of the treadmill at the time it was shipped from the factory.
6. Damages to the treadmill finish during shipping, installation or following installation.

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 treadmills not requiring component replacement, or treadmills not in ordinary household use.
3. Damages caused by services performed by persons other than authorized Spirit service companies; use of parts other than original Spirit parts; or external causes such as 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 Mfg. Spirit 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.

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 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 dealer. OR
2. Contact your local authorized Spirit service organization.
3. If there is a question as to where to obtain service, contact our service department at (870) 935-1107.
4. If no local service is available, Spirit will repair or replace the parts, at Spirit's option, within the warranty period at no charge for parts. All transportation costs, both to our factory and upon return to the owner, are the responsibility of the owner. The owner is responsible for adequate packaging upon return to Spirit. Spirit 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.
5. For any further information, or to contact our service department by mail, send your correspondence to:

Spirit Manufacturing, 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 50 states of the U.S.A. and Canada.

Z100 Series / Z300 Series / Z500 Series / Z700 Series

Drive Motor 30 Years
Deck Wear 5 Years
Electronics 5 Years / Belt 5 Years / Rollers 5 Years
Frame Weldments Lifetime
All Other Components 5 Years