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Before using your **Lifecycle** exercise bike, it is essential that you read this ENTIRE operation manual and ALL instructions.

It will help you set up your **Lifecycle** exercise bike quickly and give instructions on how to use it correctly.

### **FCC Warning - Possible Radio / Television Interference**

**NOTE:** This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- *Reorient or relocate the receiving antenna.*
- *Increase the space between the equipment and the receiver.*
- *Connect the equipment to an outlet on a different circuit than that to which the receiver is connected.*
- *Consult an exercise equipment dealer or an experienced radio/TV technician for help.*



**You are cautioned that any changes or modifications to this equipment could void your product warranty!**

Any service, other than cleaning or user maintenance, must be performed by an authorized service representative. There are no user serviceable parts.

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**This Operation Manual describes the functions of the following products:**

**Life Fitness Lifecycle exercise bikes**

***upright 4500***

***recumbent 4500R***

***upright 6500HR***

**See “Specifications” page in this manual for product specific features.**

# 1

## GETTING STARTED

### 1.1 Important Safety Instructions

- ⚙ Always follow the console instructions for proper operation.
- ⚙ Close supervision is necessary when used by or near children, invalids or disabled persons.
- ⚙ Never operate a Life Fitness exercise bike if it has been dropped, damaged, or even partially immersed in water. Contact Life Fitness Customer Support Services for assistance.
- ⚙ Never insert objects into any opening in your **Lifecycle** exercise bike. If an object should drop inside, carefully retrieve it. If you cannot reach the item, contact Life Fitness Customer Support Services.
- ⚙ Never place liquids of any type directly on the unit, except in an accessory tray. Containers with lids are recommended.
- ⚙ Do not use the **Lifecycle** exercise bike outdoors, near swimming pools or in areas of high humidity.
- ⚙ Do not use the **Lifecycle** exercise bike in areas where aerosol spray products are being used or where oxygen is being administered. Such substances increase the danger of combustion and explosion.
- ⚙ Keep all loose clothing, shoelaces, and towels away from the **Lifecycle** exercise bike pedals.
- ⚙ Keep the area around your **Lifecycle** exercise bike clear of any obstructions, including walls and furniture.
- ⚙ Always be careful and exercise caution when mounting or dismounting your **Lifecycle** exercise bike. Use the handlebar whenever additional stability is required.
- ⚙ Wear shoes with rubber or high-traction soles. Do not use shoes with heels, leather soles, cleats or spikes. Do not use the bike in your bare feet.
- ⚙ Do not tip the **Lifecycle** exercise bike on its side during operation.

### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



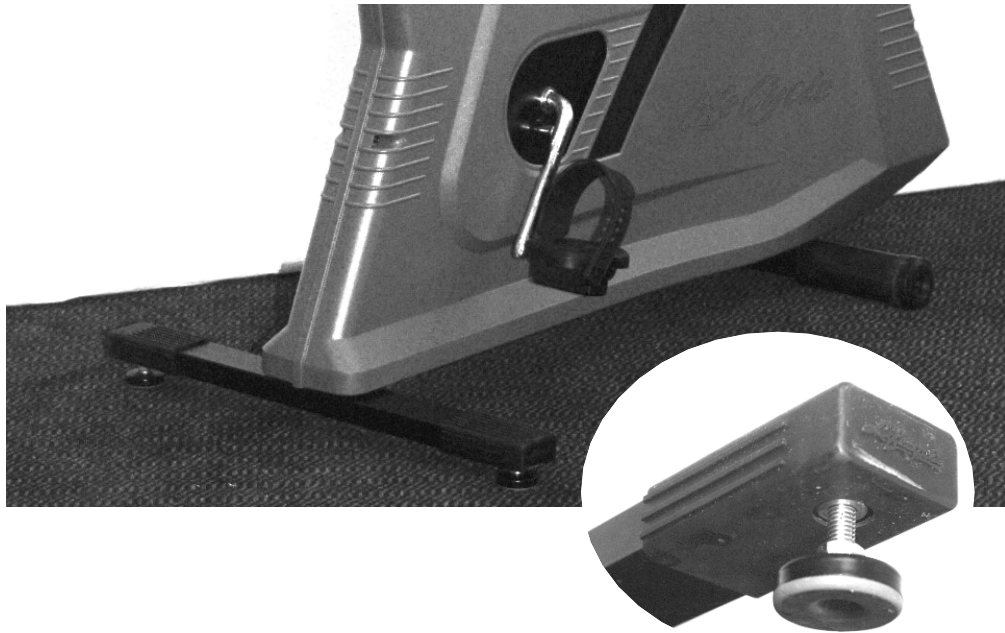
CAUTION

Life Fitness **STRONGLY** recommends that if you are undertaking an exercise program please see your physician for a complete medical exam, particularly if you have a family history of high blood pressure or heart disease, are over the age of 45, or if you smoke, have high cholesterol, are obese, or have not exercised regularly in the past year.

If, at any time while exercising, you feel faint, dizzy, pain, or shortness of breath, stop immediately.

## 1.2 How to Stabilize the Lifecycle Exercise Bike

Depending on the surface on which the **Lifecycle** exercise bike is placed, it may need to be stabilized. After you place the bike where you will primarily use it, check the stability of the bike by attempting to rock it back and forth. If it rocks, it is not stable. To stabilize it, rotate the foot on the stabilizer bar that appears to be higher counter-clockwise (as viewed from above) with your finger until the bike is level. Tighten the locknut.



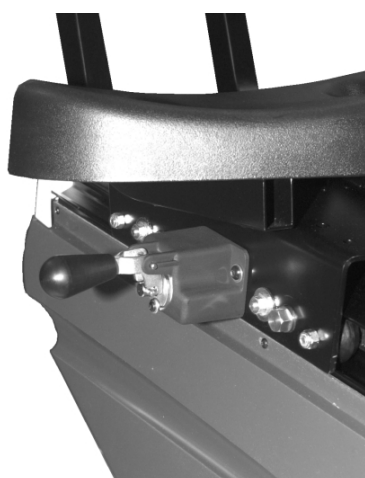
## How to Adjust the Seat

A properly adjusted seat is extremely important in any bike-oriented exercise activity and the **Lifecycle** exercise bike is no exception. If the seat is too close, excessive strain will be placed on the knees and quadriceps muscles; if the seat is too far, the resulting reaching action will irritate the feet, ankles, hips and knees.

Sit on the seat and place the balls of your feet on the pedals. An optimum position will allow you to move through the bottom of the stroke without locking your knees or shifting in the seat (your knees should have a slight bend at the point of fullest leg extension).

### Upright Exercise Bikes:

If the seat needs to be adjusted, dismount the bike and pull the spring-loaded adjusting pin located on the back of the seat post (or pull out the adjusting pin located on the front of the seat post). Slide the seat post up or down as necessary to the proper position and release the pin to complete engagement. Check the seat height again and readjust it if necessary.



### Recumbent Exercise Bikes:

If the seat needs to be adjusted, lift the spring-loaded adjusting handle located on the right, front side of the seat. Slide the seat forward or backward as necessary to the proper position and release the pin to complete engagement. Gently slide the seat forward and backward a small distance to ensure it is locked into place. Check the seat distance again and re-adjust it if necessary.



**Do not attempt to adjust the seat while you are pedaling the bike. Doing so or failing to insert the seat pin completely may result in an uncomfortable workout or cause injury.**

## 1.4 How to Adjust the Footstraps

The pedals on the *Lifecycle* exercise bike have footstraps with slits on both the inside and the outside of each strap. To adjust the size of the straps, grasp the outside of the strap and pull down and away from the knob. Once the slotted end is removed, choose a size that will feel the most comfortable while riding, reinsert the knob through the slot and pull the strap up. The knob will click when it locks in place.



**Do not attempt to adjust the pedal footstraps while you are pedaling the bike. Doing so may result in an uncomfortable workout or cause injury.**



## 1.5 Optional Settings for the Lifecycle Exercise Bike

### ● Maximum Program Time

The maximum program time option allows the maximum program time to be changed from the default maximum time limit of 60 minutes to anywhere from 1 to 99 minutes. Altering the maximum program time will affect all programs except the Fit Test. To change the **Lifecycle** exercise bike's maximum program time, proceed as follows:

1. Press and hold the **5** key on the numeric keypad.
2. Begin pedaling, then press **START**.

All LEDs and 7-segment displays will be illuminated when you enter Diagnostic State 1. The maximum program time default settings are located in Diagnostic State 5. Each time you press the **ENTER** key you will advance one diagnostic state. Continue to advance to Diagnostic State 5.

3. When you reach Diagnostic State 5, the current **MAXIMUM PROGRAM TIME** setting will be displayed. The factory set default maximum program time is 60 minutes.
4. Use the **1** key to decrease the **MAXIMUM PROGRAM TIME** or the **3** key to increase the **MAXIMUM PROGRAM TIME**.
5. To exit the Diagnostic States, press the **CLEAR / PAUSE** key repeatedly until you return to the user display. The user display is the initial display console you see when you approach the unit for normal operation.

### ● English / Metric toggle

Follow steps 1, 2 and 3 as listed above to reach Diagnostic State 5 and continue with Step 4 as listed below.

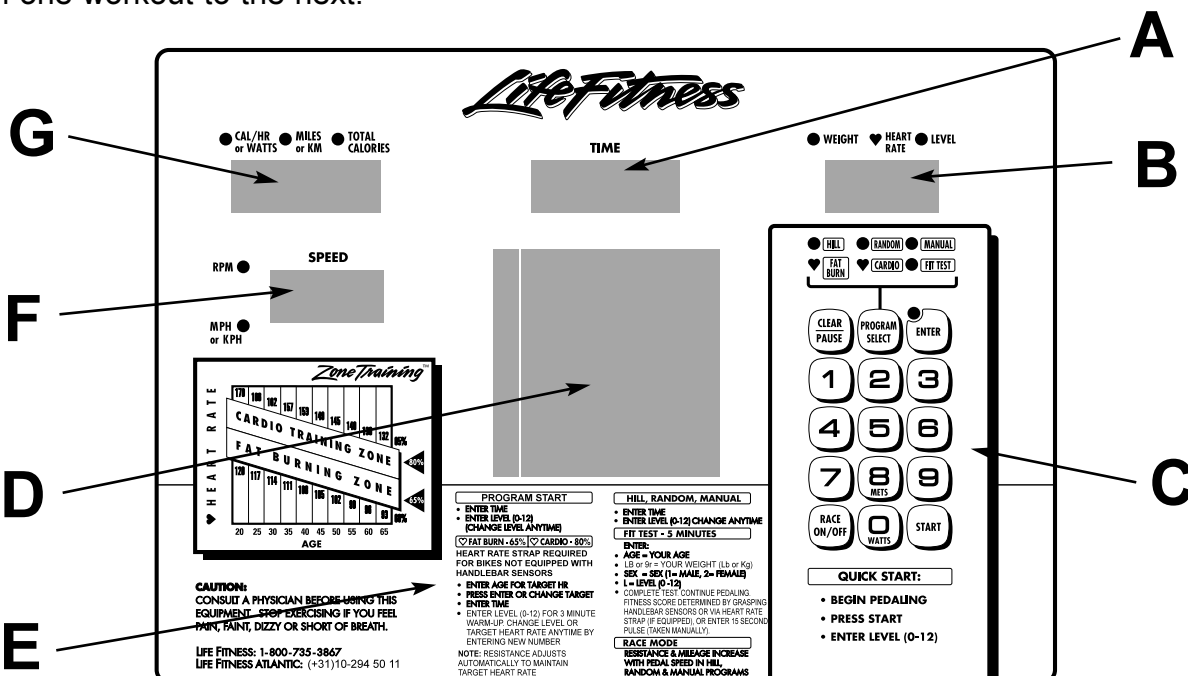
4. Press the **ENTER** key two more times to reach Diagnostic State 7. This state indicates the display console default setting of English or Metric units.  
  
When the default is set to English units of measurement, it will read 'E' in the upper right window of the display console.  
  
When the default is set to Metric units of measurement, it will read '9' in the upper right window of the display console.
5. To exit the Diagnostic States, press the **CLEAR / PAUSE** key repeatedly until you return to the **SELECT PROGRAM** state (all program LED's will be flashing).

# 2

## THE DISPLAY CONSOLE

### 2.1 Display Console Overview

The *Lifecycle* exercise bike's display console is easy to use and it allows you to follow progress as you ride. The on-board computer lets you tailor workouts to individual fitness capabilities and goals while providing a unique means of measuring fitness improvement from one workout to the next.



### 2.2 Console Descriptions

#### **A** Elapsed Time Window

**ELAPSED TIME WINDOW:** Shows the riding time selected in the Manual, Random, Hill, Fat Burn and Cardio heart rate management programs and the total elapsed time of the workout. When the CLEAR / PAUSE key is pressed, the display functions as a stopwatch (you must continue pedaling). For additional information see Operating Instructions and Program Descriptions.

#### **B** Data Entry Window

**DATA ENTRY WINDOW:** Displays most data prompts and inputs the effort level chosen (which remains displayed throughout the workout, except in the Fit Test program or when Watts or METS workouts are selected). Your actual and target heart rates also will be displayed here when using the Lifepulse grips or wearing the optional heart rate monitor chest strap (depending on Lifecycle model).



## Data Entry Zone

**DATA ENTRY ZONE:** Allows information pertinent to the program selected to be entered.



**PROGRAM SELECT:** This is where to select the workout program. Each time you press the PROGRAM SELECT key, an LED light will move from left to right to the next program option. When the program you want is displayed press ENTER or wait 10 seconds and your choice will be automatically entered.



**START:** Activates the display console once you begin pedaling and is then inactive for the remainder of the workout.



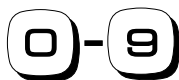
**ENTER:** Actually executes the input of any information keyed in. It is not necessary to press ENTER when keying in a new effort level.



**RACE ON / OFF:** Lets you toggle in and out of the Race mode at any time in the Manual, Random and Hill programs. The Speed / RPM display will toggle between RPMs and MPH / KPH every five seconds. The MPH / KPH will be dependent on the pedal speed and the level chosen. See the Race Option inset later in this manual.



**CLEAR / PAUSE:** Use this key to clear data before pressing the ENTER key. This key will also put your workout program on hold or restart it. To put a workout on hold, press the key once and continue pedaling (remember, pedaling powers the machine; if you stop pedaling, all power is lost and the display will go blank). Pedal resistance drops to the minimum when the *Lifecycle* exercise bike is paused and the stopwatch function is activated and the elapsed time window begins counting up from zero. Use this as a brief rest period if you feel fatigued or to take your heart rate. Resume the workout by pressing ENTER once, or end the workout by pressing CLEAR/PAUSE twice.



**NUMERIC KEYS:** Use these keys to enter riding time, level of difficulty and Heart Rate or Fit Test data. You can select a workout duration of anywhere from 1 to 99<sup>†</sup> minutes. You also enter a different resistance level than your current level, a different target heart rate for the Fat Burn and Cardio programs, or Fit Test data such as age, gender or weight via the numeric keypad.



**WATTS (0) and METS (8):** This key allows you to view your workout results in Watts or METS. (For more information on Watts and METS please see Watts / METS Programmability Option.)

<sup>†</sup>60 minutes is the factory setting for the Maximum Program Duration. To increase or decrease the Maximum Program Duration see the Optional Settings for the Lifecycle exercise bike section.

**D****Program Profile Window**

**PROGRAM PROFILE WINDOW:** Displays a matrix of lights showing the present position and upcoming terrain. The higher the column of lights the greater the resistance. The left-most column of lights represent the current position. The remaining columns show the upcoming terrain. As the workout progresses, the lights move across the screen from right to left. When at the Program Select stage, graphical depictions of each program appear in the Program Profile Window as that program's LED is lit.

In the Fat Burn and Cardio programs, a heart shape (♥) will be displayed in the window; this is your prompt to grasp the Lifepulse sensors (if so equipped) so that the on-board computer can obtain your heart rate. When your heart rate has been read, the heart will disappear and you may remove your hands. If you have a telemetry equipped model and are not wearing an optional heart rate monitor chest strap or it is not detected, the heart will flash (the exercise bike will switch to the Manual program at half the selected level if no heart rate is detected during the first three minutes of the warm-up). A flashing heart will also appear at the conclusion of the Fit Test if you are not wearing a heart rate monitor chest strap.

**E****Summary Instructions**

**SUMMARY INSTRUCTIONS:** An abbreviated version of the steps required to begin a workout on the *Lifecycle* exercise bike. This is a summary of the information presented in greater detail throughout this manual.

**F****Speed Window**

**SPEED WINDOW:** The *Lifecycle* exercise bike can display speed in revolutions per minute (RPMs) or miles or kilometers per hour (MPH / KPH) when in the Race mode. In the Hill, Random and Manual programs, you may switch in and out of the Race mode whenever you wish. When in the Race mode, the Speed Window will toggle between RPMs and MPH or KPH every five seconds.

**G****Feedback Window**

**FEEDBACK WINDOW:** Displays the number of calories burned per hour, total distance traveled (in miles or kilometers), total calories, or Watts or METS if you have selected one of these options. The readout automatically displays these forms of feedback in 10-second intervals, except when in the Hill program for a duration of less than six minutes when it changes every five seconds.

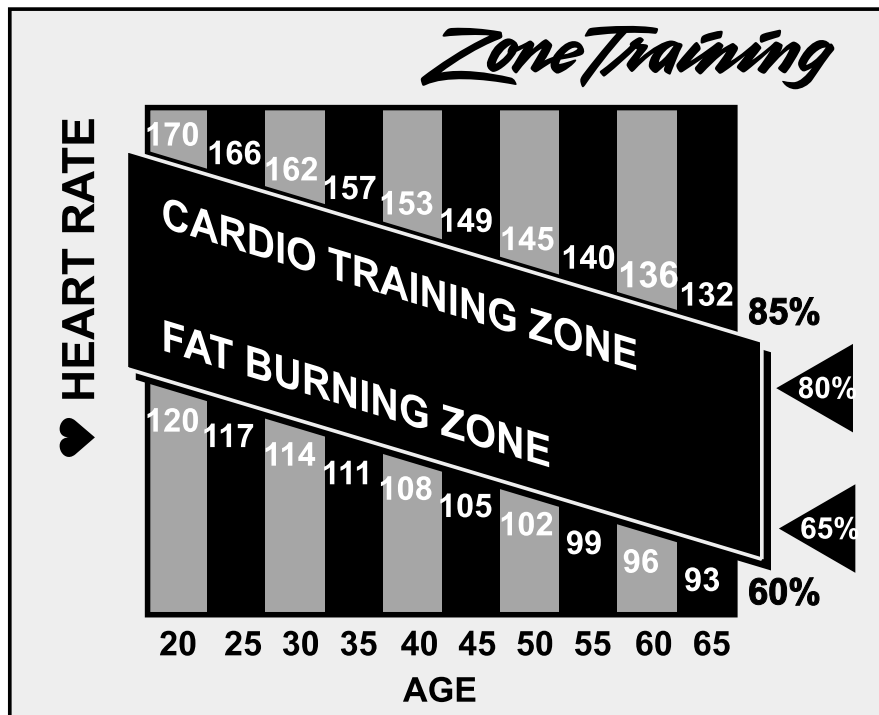
# 3 HEART RATE ZONE TRAINING™ EXERCISE

## 3.1 Why Heart Rate Zone Training?

Research shows that exercising within a specific heart rate range is the optimal way to monitor exercise intensity and achieve maximum results. That is the idea behind the Life Fitness Heart Rate Zone Training exercise program.

Zone Training takes the guesswork out of working out by identifying specific ranges, or zones, in which to maintain a heart rate to achieve maximum exercise results according to personal goals. In short, Zone Training all but eliminates under- and over-training by allowing you to target your heart rate to your individual fitness objectives.

For instance, if the primary goal is to burn fat, exercise at a level between 60% and 75% of your theoretical maximum heart rate<sup>†</sup>. To improve cardiovascular condition, you should work out at 75% to 85% of your theoretical maximum heart rate.



Life Fitness offers two exclusive programs designed to take full advantage of the benefits of Heart Rate Zone Training: Fat Burn and Cardio. Vary the focus of exercise activities by switching between the Fat Burn and Cardio program at any time during a workout or by entering a new target heart rate with the keypad.

Both the Fat Burn and Cardio programs measure heart rate. As you exercise, grasp the Lifepulse sensors (if so equipped) when prompted or simply wear an optional telemetry heart rate chest strap (on telemetry equipped models) and your heart rate will be transmitted to the on-board computer. The resistance level will automatically adjust to maintain the target heart rate based on your actual heart rate.

<sup>†</sup>(Defined by the American College of Sports Medicine's "Guidelines for Exercise Testing and Prescription" as 220 minus your age.)

## 3.2 Heart Rate Monitoring

### The Lifepulse® Digital Heart Rate Sensors

The patented Lifepulse digital heart rate sensors are the built-in heart rate monitoring system on some models of the *Lifecycle* exercise bikes.

To use the Lifepulse sensors, simply grasp the stainless steel sensors on the handlebars when the display console prompts you with the ♥, or anytime you wish to check your heart rate. There are four sensors - two on each grip.

You must make contact with all four to obtain your heart rate. The console will display your heart rate in 10 to 30 seconds.

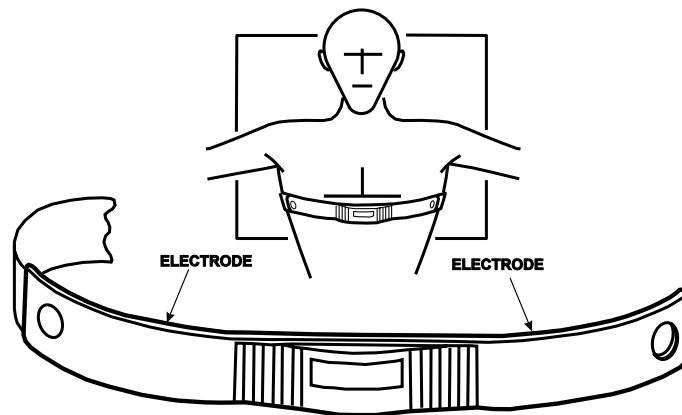
### The Optional Heart Rate Chest Strap

Wet the electrodes to the transmitter (the two grooved surfaces on the underside of the strap) and secure the strap as high under the chest muscles as possible. The strap should be snug, but comfortable enough to allow for normal breathing.

The transmitter strap will deliver an optimum heart rate reading when the electrodes are directly in contact with bare skin. However, it will function properly through wet, lightweight clothing.

The key to proper operation is for the electrodes to remain wet to conduct the electrical impulses of the heart back to the receiver.

If it becomes necessary to remoisten the chest strap transmitter, grasp the center of the strap, pull it away from the chest to expose the two electrodes, then moisten them in this position.



# 4

## THE PROGRAMS

### 4.1 Program Overview

Selecting a workout program on the **Lifecycle** exercise bike is easy. Six computerized aerobic workouts, including the exclusive Fat Burn, Cardio and Fit Test programs, are preprogrammed on the **Lifecycle** exercise bike.



**MANUAL** maintains a constant effort level based on the goals selected.



**RANDOM** is a program of varying effort levels which occur randomly with each exercise session, resulting in more than one million workout combinations.



**HILL** is an interval training workout consisting of a warm-up period followed by a plateau of constant effort, progressively more difficult levels of effort (hills) separated by periods of recovery (valleys) and a cool-down period.



**FAT BURN** is a Heart Rate Zone Training™ program designed to burn an optimum amount of calories from fat by automatically maintaining a target heart rate of 65% of your theoretical maximum heart rate.



**CARDIO** is a Heart Rate Zone Training™ program designed to increase cardiovascular fitness by automatically maintaining a target heart rate of 80% of your theoretical maximum heart rate.



**FIT TEST** is a way of measuring the aerobic fitness level of an individual compared to others of the same age and gender.

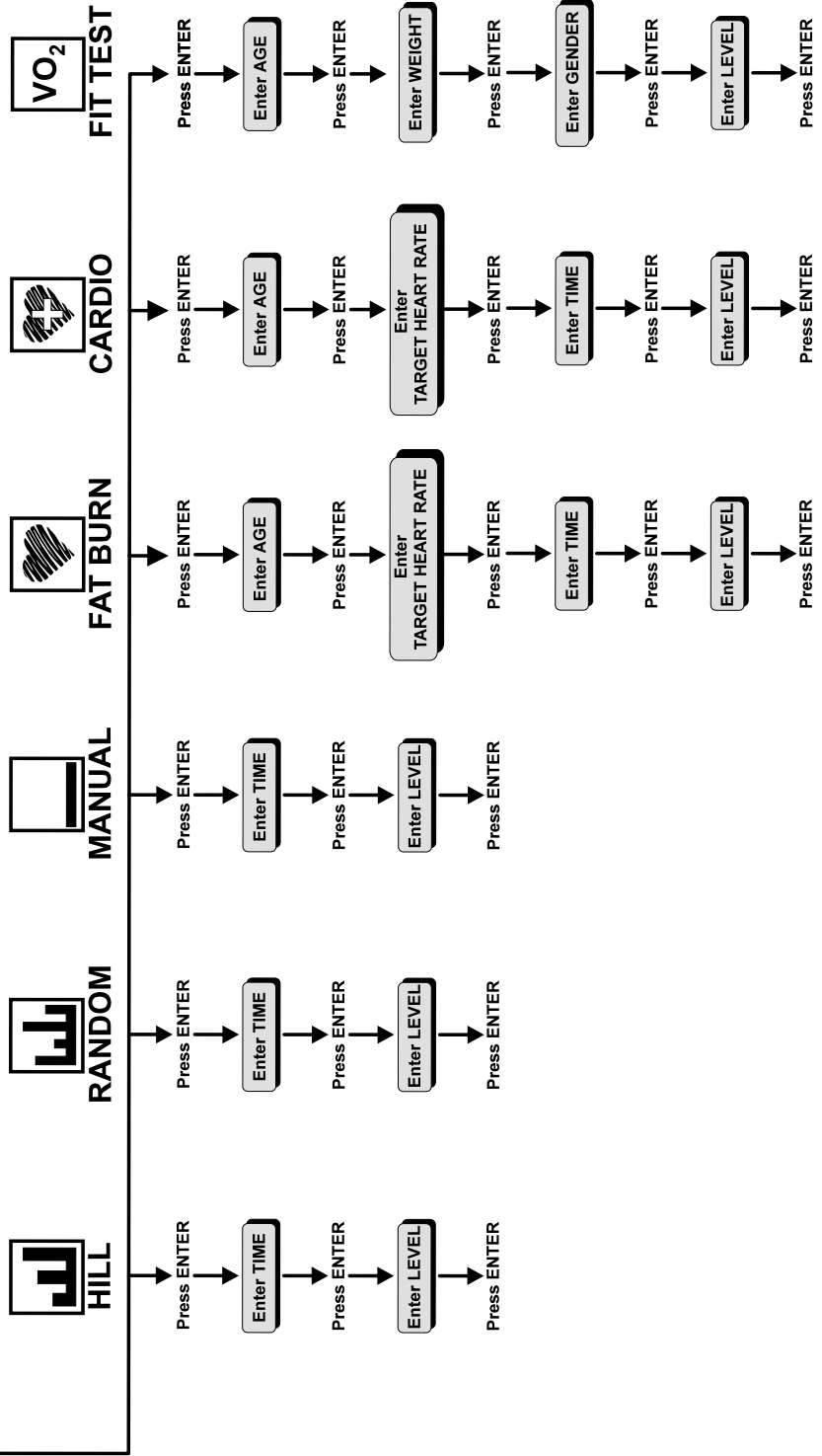
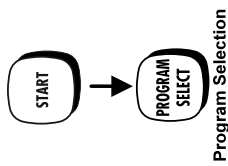
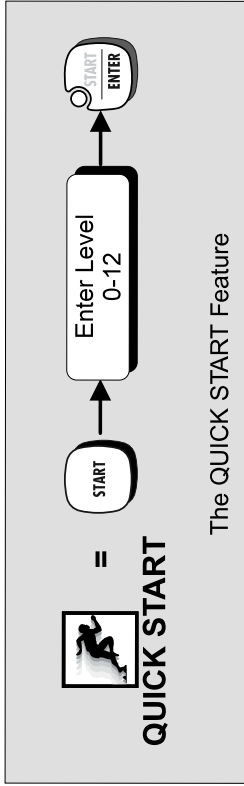
The **Lifecycle** exercise bike is a “constant work” machine; in the Manual, Random and Hill programs, pedal resistance automatically compensates for changes in RPM. In other words, the slower you pedal, the greater the resistance; conversely, the faster you pedal the less resistance you feel\*. The distance you travel will remain the same; pedaling faster will not bring you to the end of a program sooner or burn more calories, assuring you of a consistent workout. If you prefer to be “rewarded” for going faster, then try the Race mode option.

**NOTE: Mileage readings are arbitrary and should not be used to compare workouts in different programs. Total calories burned is the best measure of the amount of work performed in any given workout.**

\*This is true as long as you pedal faster than 65 RPM. Below 65 RPM, the resistance will drop off to the point where you can continue pedaling at a pace sufficient to maintain power to the electronics.



# The Programs Step by Step





## 4.2 Program Descriptions

### To Begin a Lifecycle Exercise Bike Workout:

- First adjust the seat position and make certain the seat pin is properly locked and the bike is level.
- Begin pedaling and press the START key.
- Select one of the flashing program options by pressing the PROGRAM SELECT key until the program you want is lit and then press ENTER (or wait 10 seconds and your selection will be automatically entered).
- You can “Quickstart” a Manual program workout without using the PROGRAM SELECT key. To do so, just press ENTER before selecting a program. The computer will automatically begin a Manual workout at the maximum allowable program time and prompt you to enter a resistance level. If you press a number from 0 – 9 rather than ENTER, the computer will automatically begin a Manual workout at the maximum allowable program time and that effort level (enter 1 - 0, 1 - 1, or 1 - 2 for effort levels 10 - 12).

**REMEMBER – You can change effort levels any time during a workout\* by simply keying in a new level on the keypad!**

\*Except in the Fat Burn and Cardio programs in which you may change your target heart rate.



## Manual and Random Programs



### MANUAL PROGRAM

- After selecting a Manual workout, you will be asked to enter a desired workout time in minutes. Enter a number from 10 to 60<sup>†</sup> minutes and press ENTER.
- Select an effort level from 0 – 12. The effort level will be displayed in the Data Entry Window (you do not need to press ENTER).

The Manual program provides steady-pace exercise equal to that of the highest hill encountered on the Hill program at the same level of effort (except at level 0, when the resistance equals that of the lowest valley). Because of the greater resistance levels of this program, it is recommended that you set the Manual program two to three levels lower than the level of effort that would normally be selected on the Hill program.

You can design your own interval training program using the Manual program by varying the level of effort during the course of your workout. To do so, select a high level of resistance until you reach the upper end of your target heart rate zone, then ride at a lower effort level until your heart rate drops to the bottom of your target zone. Then increase the level of effort again until you are back to the upper portion of your target zone. By repeating this process, you will actually create your own hills and valleys.



### RANDOM PROGRAM

- After selecting a Random workout, you will be asked to enter the desired workout time in minutes. Enter a number from 10 to 60<sup>†</sup> minutes and press ENTER.
- Select an effort level from 0 – 12. The effort level will be displayed in the Data Entry Window (you do not need to press ENTER).

The computer randomly selects hill and valley terrain which varies with each and every workout, resulting in more than one million combinations. Because resistance levels are greater in this program than in the Hill program, it is recommended that the Random program be set one or two levels lower than the level of intensity that would normally be selected on the Hill program.

<sup>†</sup> 60 minutes is the factory setting for the Maximum Program Duration. To increase or decrease the Maximum Program Duration see the Optional Settings for the Lifecycle Exercise Bike section.





## HILL PROGRAM

- After selecting a Hill workout, you will be asked to enter the desired workout time in minutes. Enter a number from 10 to 60<sup>†</sup> minutes and press ENTER.
- Select an effort level from 0 – 12. The effort level will be displayed in the Data Entry Window (you do not need to press ENTER).

The **Lifecycle** exercise bike's patented Hill program offers the ideal configuration for interval training: periods of intense aerobic activity separated by regular intervals of lower-intensity exercise. Interval training programs have been scientifically demonstrated to yield greater cardiorespiratory improvement than steady-pace training.

Not only does the Hill program offer the challenge of alternating periods of high and low intensity, but the levels of intensity become progressively more difficult during the course of the program. Because you have the option of working out in a Hill program from 1 to 60<sup>†</sup> minutes, and because the Hill program is composed of four distinct phases, the 20 intervals that make up the program must be structured differently to accommodate the entire array of program durations. Longer workouts add more hills.

<sup>†</sup> 60 minutes is the factory setting for the Maximum Program Duration. To increase or decrease the Maximum Program Duration see the Optional Settings for the Lifecycle Exercise Bike section.

Each Hill program session comprises the following phases:

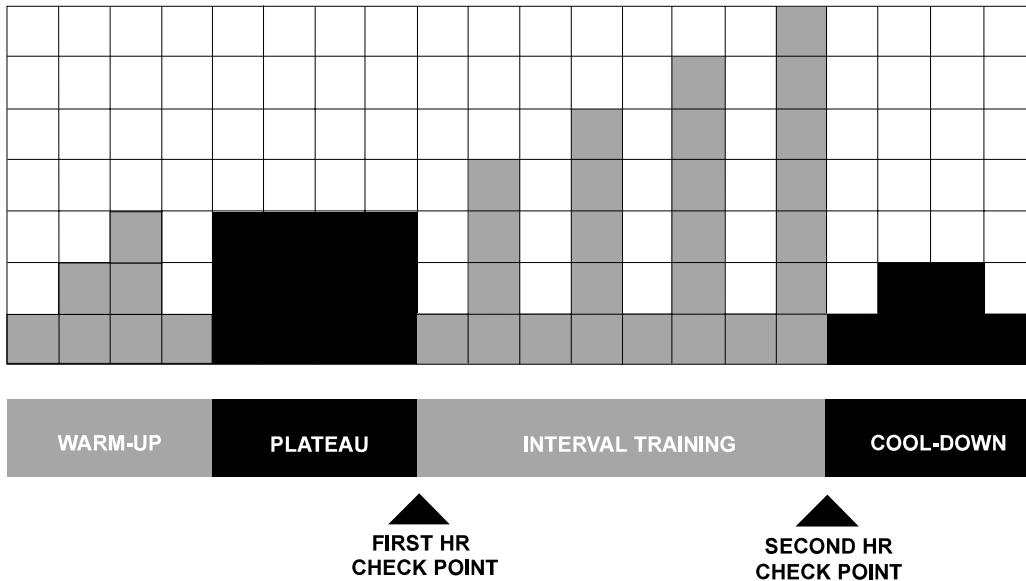
### (1) Warm-up, (2) Plateau, (3) Interval Training, and (4) Cool-down

- **Warm-up:** Gradually brings your heart rate into the lower portion of your target heart rate zone, increasing respiration and blood flow to working muscles.
- **Plateau:** Brings your heart rate in your target zone.
- **Interval Training:** A series of hills and valleys. During this portion of the workout, you will be confronted with sets of four successively steeper hills, each separated from the next by a valley, or recovery period. Check your heart rate at the end of the interval training period to ensure that you have stayed within your target zone.
- **Cool-down:** Allows the body to begin removing accumulated by-products of exercise, such as lactic acid, which build up in muscles during a workout and contribute to muscle soreness.



The Hill diagram below shows the effort level and recovery periods encountered during a Hill workout. Effort and recovery periods are simulated on the display console by columns of lights in the Program Profile Window. The columns move from right to left during the workout. The higher the column, the higher the incline; consequently, you must increase the effort.

### TERRAIN (HILLS AND VALLEYS)



## Heart Rate Check Points

### For Fat Burning:

- ✓ **First Heart Rate Check Point** — Your heart rate should be between 60% and 70% of the theoretical maximum heart rate for your age category.
- ✓ **Second Heart Rate Check Point** — Your heart rate should be between 70% and 75% of the theoretical maximum heart rate for your age category.

### For Cardio:

- ✓ **First Heart Rate Check Point** — Your heart rate should be between 75% and 80% of the theoretical maximum for your age category.
- ✓ **Second Heart Rate Check Point** — Your heart rate should be between 80% and 85% of the theoretical maximum for your age category.

Be sure to check your heart rate near the end of the plateau and interval training periods using the Lifepulse Sensors, (if so equipped), if not wearing an optional heart rate chest strap (see Hill diagram above). You should always take your heart rate at the time indicated to make sure you are staying within your target heart rate zone.



## Fat Burn and Cardio Programs

On models equipped with telemetry heart rate features, the user must wear an optional heart rate chest strap transmitter to use these programs. On models equipped with Lifepulse sensors, the user must grasp the Lifepulse sensors when prompted by a flashing heart in the program window.

- Enter age using the numeric keypad to receive a computed target heart rate. Press ENTER to accept the calculated target or input a chosen target heart rate using the keypad and press ENTER.
- The Data Entry Window will prompt you to enter a time from 1 – 60<sup>†</sup> minutes. Key in the time you want the workout to last and press ENTER.
- Finally, select a warm-up effort level from 0 – 12. The effort level will be displayed in the Data Entry Window (you do not need to press ENTER) and your heart rate management program will begin a three minute warm-up at this level or until you reach your target heart rate, whichever comes first, followed by the actual heart rate controlled portion of the program.



### FAT BURN

The Fat Burn and Cardio heart rate management programs work by adjusting the resistance of the **Lifecycle** exercise bike in response to your heart rate. The programs use heart rate technology to monitor your heart rate and automatically adjust the work load to maintain your target heart rate. The end result is a perfect workout every time, eliminating both under- and over-training.

On the **Lifecycle** exercise bike, the Fat Burn program uses the technology of heart rate monitoring to automatically keep your heart rate at 65% of your theoretical maximum heart rate<sup>‡</sup> or another target heart rate that you enter. Pedal resistance will automatically adjust to maintain the target heart rate. Exercising at 65% of your theoretical maximum heart rate maximizes the aerobic benefits of exercise by accessing the body's fat stores for fuel.

<sup>†</sup> 60 minutes is the factory setting for the Maximum Program Duration. To increase or decrease the Maximum Program Duration see the Optional Settings for the Lifecycle Exercise Bike section.

<sup>‡</sup> (Defined by the American College of Sports Medicine's "Guidelines for Exercise Testing and Prescription" as 220 minus your age.)



### CARDIO

The Cardio program is virtually identical to the Fat Burn program. The only difference is that your target heart rate is calculated at 80% of your theoretical maximum to accentuate cardiovascular improvement by placing a heavier work load on the heart muscle. If you wish to vary the focus of the exercise activities, switch back and forth between the Fat Burn and Cardio programs at any time during a workout, creating the ultimate interval training program!



**REMEMBER:** You may change your target heart rate at any time after the warm-up period by simply keying in a new target heart rate.

The Life Fitness Heart Rate program begins with a three minute warm-up period designed to safely get you closer to your target heart rate from a resting start. It should take two to three minutes for your heart rate to reach the target.

**NOTE:** If your heart rate is above the chosen target during the warm-up period, the warm-up period will immediately end and the *Lifecycle* exercise bike will begin automatically varying its resistance to maintain the target heart rate.

## VO<sub>2</sub> FIT TEST

The *Lifecycle* exercise bike Fit Test program is another exclusive feature of this versatile exercise bike. The Fit Test score is also an approximate measure of your VO<sub>2</sub> max; think of it as your relative fitness score. Use the Fit Test to monitor improvement in personal endurance every four to six weeks.

- After selecting the Fit Test program with the PROGRAM SELECT key, the data entry window will ask for age (AGE). Use the numeric keys to input age and press ENTER.
- After entering age, the data entry window will ask for weight: Lb (for weight in pounds on English units) or gr (for weight in kilograms on metric units). Use the numeric keys to input weight and press ENTER.
- After entering weight, the data entry window will ask you to select gender (SE). Press 1 for male or 2 for female and then press ENTER.
- Finally, consult the Activity Levels chart on the following page for the effort level (L). You should take the Fit Test based on age, gender and activity level. Use the numeric keys to enter the corresponding level.

After having completed the five-minute Fit Test, your heart rate will be automatically entered by the Lifepulse sensors or from your optional heart rate chest strap by the on-board computer (to enter heart rate manually, use the time prompt to take your pulse and enter it with the numeric keys). The Fit Test score will be displayed, which you can use to find your ranking in the fit Test scoring tables located in this section.



RECOMMENDED FIT TEST LEVELS					
AGE	WEIGHT	(KG)	INACTIVE	ACTIVE	VERY ACTIVE
<30	<130	<59	1	2	3
	131-169	59.5 - 76.8	2	3	4
	170-210	72.3 - 95.5	3	4	5
	>210	>95.5	4	5	6
30-39	<130	<59	0	1	2
	131-169	59.5 - 76.8	1	2	3
	170-210	72.3 - 95.5	2	3	4
	>210	>95.5	3	4	5
40-49	<130	<59	0	0	1
	131-169	59.5 - 76.8	1	1	2
	170-210	72.3 - 95.5	1	2	3
	>210	>95.5	2	3	4
50+	<130	<59	0	0	0
	131-169	59.5 - 76.8	0	1	1
	170-210	2.3 - 95.5	1	1	2
	>210	>95.5	1	2	3

**NOTE: If your weight varies from these values substantially, you may wish to increase or decrease the indicated levels accordingly.**

If your heart rate is below 65% of your theoretical maximum heart rate at the conclusion of the Fit Test, retake the test at a higher level.

The Fit Test is an estimate of your  $VO_2$  max, which is a measurement of how well the heart supplies oxygenated blood to the exercising muscles and how efficiently those muscles receive oxygen from the blood. This measurement is generally regarded by physicians and exercise physiologists as the standard for aerobic capacity.

## Fit Test Tips

The computer will not accept:

- heart rates less than 90 or greater than 199 beats per minute
- body weights less than 74 pounds (34 kg) or greater than 350 pounds (159 kg)
- ages below 10 or over 99 years
- data input that exceeds human potential

If you make an error when entering any Fit Test data, you can correct it by pressing CLEAR / PAUSE, inputting the correct information, and pressing ENTER.

It is important to take the Fit Test under similar circumstances each time. The heart rate is dependent on many factors, including:

- amount of sleep the previous night (at least seven hours is recommended)
- time of day
- time since last meal (two to four hours after the last meal is recommended)
- time since last drinking a liquid containing caffeine or alcohol or smoking a cigarette (at least four hours is recommended)
- time since having last exercised (at least six hours is recommended)

For the most accurate Fit Test results, you should perform the Fit Test on three consecutive days and average the three scores.

**NOTE:** To receive a proper Fit Test score, you must work within your training heart rate zone, which is 60% to 85% of your theoretical maximum heart rate.



### RELATIVE FITNESS CLASSIFICATION FOR MEN

Rating	AGE				
	20 - 29	30 - 39	40 - 49	50 - 59	60+
Elite	55+	52+	50+	48+	45+
Excellent	50 - 54	47 - 51	45 - 49	43 - 47	40 - 44
Good	45 - 49	42 - 46	40 - 44	38 - 42	35 - 39
Above Average	40 - 44	37 - 41	35 - 39	33 - 37	30 - 34
Average	36 - 39	33 - 36	31 - 34	29 - 32	26 - 29
Below Average	31 - 35	28 - 32	26 - 30	24 - 28	21 - 25
Poor	26 - 30	23 - 27	20 - 25	18 - 23	16 - 20
Very Poor	<26	<23	<20	<18	<16

### RELATIVE FITNESS CLASSIFICATION FOR WOMEN

Rating	AGE				
	20 - 29	30 - 39	40 - 49	50 - 59	60+
Elite	49+	46+	44+	42+	40+
Excellent	44 - 48	41 - 45	39 - 43	37 - 41	35 - 39
Good	39 - 43	36 - 40	34 - 38	32 - 36	30 - 34
Above Average	34 - 38	31 - 35	29 - 33	27 - 31	25 - 29
Average	30 - 33	27 - 30	25 - 28	23 - 26	21 - 24
Below Average	25 - 29	22 - 26	20 - 24	18 - 22	16 - 20
Poor	20 - 24	17 - 21	15 - 19	13 - 17	11 - 15
Very Poor	<20	<17	<15	<13	<11

*Fit Test scoring*

## 4.3 How to Maximize Workouts on the Lifecycle Exercise Bike

In all **Lifecycle** exercise bike workout programs except the Fit Test, you can change the level of intensity at any time by simply pressing a new number – between 0 and 12 – on the numeric keypad. In addition, should you decide to work out in one program after starting another, simply push CLEAR three times to clear the first program and then select the new program.

### Selecting the Correct Intensity Level

The **Lifecycle** exercise bike offers 13 levels of intensity, or difficulty, to choose from – level 0 is the easiest and level 12 is the most challenging. Select a low effort level until becoming accustomed to the **Lifecycle** exercise bike, then increase the intensity as conditioning improves.

The Random and Manual programs are proportionately more difficult than the Hill program. Because of this, be careful to select an effort level in the Random program that is one to two levels lower than would normally be selected in the Hill program. Conversely, if choosing the Manual program, select an intensity level that is at least three levels lower than the workout level normally used in the Hill program. The following table will allow you to compare the relative intensities of the four **Lifecycle** exercise bike computerized fitness programs.

HILL	RANDOM	MANUAL OR FIT TEST
0	0	0
2	2	1
4	3-4	2
6	5	3
8	7-8	4
10	9	5
11-12	10-11	6
	12	7
		8
		9
		10
		11
		12

## 4.4 Watts / METS Programmability Options

A Watt is a unit of power which measures the amount of mechanical work required to operate a device such as an exercise bike (roughly equal to 1/4 of calories per hour).

For example, if your doctor should recommend that you exercise three times per week for 20 minutes at 100 Watts (the value must be between 33 and 338), this option would ensure that you maintain the 100 Watt level by altering the pedal resistance in proportion to your pedaling speed.

METS are a unit of measure used to express the metabolic rate of work (oxygen consumption per unit of body weight) required to perform a task. One MET is approximately equal to a person's metabolism when seated and relaxed.

Both the Watts and METS options will “lock” the feedback window, displaying only the Watts or METS values.

It is possible to enter a value of Watts or METS to maintain on your *Lifecycle*, rather than a resistance level.

To enter a value of Watts to maintain, you must first enter into the Manual program as you normally would:

- Continue pedaling
- Press 0 / Watts, then within two seconds
- Enter a Watts value between 33 and 338, then press ENTER.

To enter a value of METS to maintain:

- Begin pedaling and press the START key
- Press the 8 / METS key, then the ENTER key
- When you are prompted, enter your weight and press the ENTER key
- When you are prompted, enter into the Manual program as you normally would.

You may change your setting in either the Watts or METS mode at anytime during a workout by pressing the 0 / Watts or 8 / METS key and keying in a new Watts or METS value to maintain followed by ENTER. To return to a resistance level, key in a number between 0 – 12.

Both the Watts and METS options will “lock” the feedback window, displaying only the Watts and METS values.

## 4.5 The Race Option

The Race mode allows pedal resistance variance to simulate the feel of an actual 12-speed racing bike in the Manual, Random and Hill programs. Turn the Race mode on at any time and the Life Fitness exercise bike's 13 effort levels are transformed into the “gears” of a high performance, road-racing bicycle! The pedal resistance will change with the speed at which you pedal, enhancing the workout enjoyment while also allowing greater control over the program's intensity (the greater the resistance, the more LEDs will be illuminated). The distance traveled and the calories burned during the workout will also vary with the pedal speed.

# 5

## SERVICE AND TECHNICAL DATA

### 5.1 Preventive Maintenance Tips

The **Lifecycle** exercise bike is backed by the engineering excellence of Life Fitness and is one of the most popular, rugged and trouble-free pieces of exercise equipment on the market today. Here are some preventive maintenance tips that will keep the **Lifecycle** exercise bike operating at peak performance:

- Locate the **Lifecycle** exercise bike in a cool, dry place. Do not place it outdoors, near swimming pools or in areas of high humidity.
- Clean the seat surface, the pedals and the housing regularly with a soft, clean cloth (you may use a non-abrasive liquid cleaner on the housing).
- Clean the seat-post shaft and check the pin insertion regularly. If needed, lubricate the seat post with one or two drops of machine oil or automotive wax.
- Keep the display console free of fingerprints and salt build-up caused by sweat. Use a 100% cotton cloth lightly moistened with water and a mild liquid detergent (other fabrics or paper towels may scratch the surface).
- Long fingernails may scratch the surface of the console. Use the pad of the fingertip to press the console buttons.
- The chain (on chain drive models) and pedal shaft should be cleaned and lubricated every three months and inspected annually.

**NOTE: NEVER remove the stabilizer bar.**

## 5.2 How to Solve Basic Operating Problems

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
No Power	9-volt battery missing 9-volt battery too low Harness not connected	Install 9-volt alkaline battery Replace 9-volt alkaline battery Disconnect and reconnect harness
Difficult to pedal	10 to 15 hour break-in period not complete	Ride the bike for 10 to 15 hours
Bike shuts off during ride	Pedaling too slow Not entering desired workout duration	Pedal at 65 RPM minimum Check that desired workout duration appears in display window prior to pressing ENTER
Display flickers or fades in and out	Wire harness connector loose	Carefully remove console and disconnect then reconnect the 16-pin connector

## 5.3 Troubleshooting the Optional Heart Rate Chest Strap

The optional Heart Rate Chest Strap is required when using a *Lifecycle* bike which is equipped with Polar compatible telemetry heart rate monitoring technology.

The heart rate reading is erratic or absent entirely.

- Repeat the electrode wetting procedure (see How to Use the Optional Heart Rate Chest Strap). The electrodes must be wet to pick up and transmit accurate heart rate readings.
- Make sure the electrodes are flat against the skin.
- Wash the belt transmitter regularly with mild soap and water.
- Make sure the chest strap transmitter is within three feet (one meter) of the heart rate receiver.
- The estimated battery life of the chest strap transmitter is 2500 hours of use. If the chest strap transmitter battery is depleted, contact Life Fitness Customer Support Services for instructions on how to have your chest strap replaced. (See “How to Obtain Product Service” for locations.)

The heart rate reading is erratic or extremely high (above 200).

- When exercising with the heart rate chest strap, it may come within range of electromagnetic signals strong enough to cause abnormally elevated heart rate readings. Possible sources of such signals include television sets and/or antennas, computers, cars, high voltage power lines and motor driven exercise equipment. Another heart rate transmitter within three feet (one meter) may also cause abnormal heart rate readings.

**NOTE: There is a very small – less than one percent – portion of the general population whose heart rates can not be detected by heart rate monitors, including Electrocardiograph. This phenomenon is called biopotential and is extremely rare.**

## 5.4 How to Obtain Product Service

### Step 1

Verify the symptom and review the operating instructions and How to Solve Basic Operating Problems within this manual. The problem may be unfamiliarity with the **Lifecycle** exercise bike's features and programs.

### Step 2

Locate and document the serial number of the unit, which is located on the underside of the bike, just behind the front stabilizer bar.

### Step 3

Contact the nearest **Life Fitness**

**Customer Support Services group:**

Toll-free within the U.S. and Canada

Telephone: 800.351.3737 or 847.451.0036

FAX: 847.288.3702

### For Product Service Internationally:

#### Life Fitness Europe GmbH

Telephone: 49.89.317751.66

FAX: 49.89.317751.38

#### Life Fitness Benelux NV

Telephone: 32.3.644.4488

FAX: 32.3.644.2480

#### Life Fitness Austria Vertriebs GmbH

Telephone: 43.1.61.57198

FAX: 43.1.61.57198.20

#### Life Fitness Latin America

Telephone: 847.451.0036

FAX: 847.288.3702

#### Life Fitness (UK) Ltd

Telephone: 44.1.353.665507

FAX: 44.1.353.666018

#### Life Fitness Italia S.R.L.

Telephone: 39.472.835470

FAX: 39.472.833150

#### Life Fitness Asia Pacific Ltd

Telephone: 852.2575.6262

FAX: 852.2575.6001

Please have the serial number of the **Lifecycle** exercise bike and the problem / symptom ready for the Customer Support Services Specialist who will be assisting you. This information is necessary for us to help solve any problems you may be having.

## 5.5 Lifecycle Exercise Bike Specifications

<b>Power requirements</b>	None	
<b>Programs</b>	Manual, Random, Hill, Cardio, Fat Burn, Fit Test	
<b>Console displays</b>	Elapsed time, pedal RPM and MPH or KPH, calories per hour (Watts or METS optional), total calories burned, distance traveled (miles or kilometers), resistance level, heart rate (when wearing an optional telemetry heart rate monitoring chest strap on models without Lifepulse sensors)	
<b>Heart Rate monitor system</b>	<b>LC6500HR</b> Lifepulse digital sensors	<b>LC4500, LC4500R</b> Optional Polar® telemetry heart rate monitoring system kit available
<b>Color</b>	<b>LC4500, LC6500HR</b> Light granite	<b>LC4500R</b> Dark gray
<b>Maximum user weight</b>	<b>LC4500, LC4500R, LC6500HR</b> 250 lb / 114 kg	

### ASSEMBLED DIMENSIONS:

	<b>LC6500HR</b>	<b>LC4500</b>	<b>LC4500R</b>
<b>Length</b>	45 in / 115 cm	46 in / 117 cm	56 in / 143 cm
<b>Width</b>	23 in / 58 cm	23 in / 58 cm	25 in / 63 cm
<b>Height</b>	55 in / 139 cm	55 in / 140 cm	48 in / 122 cm
<b>Weight</b>	81 lb / 37 kg	87 lb / 40 kg	121 lb / 55 kg

### SHIPPING DIMENSIONS:

	<b>LC6500HR</b>	<b>LC4500</b>	<b>LC4500R</b>
<b>Length</b>	46 in / 117 cm	46 in / 117 cm	55 in / 140 cm
<b>Width</b>	23 in / 59 cm	23 in / 59 cm	27 in / 69 cm
<b>Height</b>	37 in / 94 cm	37 in / 94 cm	44 in / 112 cm
<b>Weight</b>	102 lb / 41 kg	105 lb / 48 kg	159 lb / 72 kg







