



PS/50

PS/100

PS50 & PS100
RECUMBENT & UPRIGHT BIKE
OWNER'S GUIDE

800.426.6570 / www.truefitness.com

THANK YOU FOR SELECTING TRUE

In 1981 Frank Trulaske launched True Fitness Technology with one goal in mind – *to make the finest fitness equipment on the market.*

His team began by manufacturing premium, handcrafted treadmills with a focus on quality and durability. Now, 25 years later, True Fitness has established its reputation as one of the oldest and most respected fitness equipment manufacturers worldwide.

While True treadmills continue to enjoy top reviews from major consumer magazines and fitness experts, its line of products has expanded.



“OUR ORIGINAL GOAL WAS TO BUILD THE WORLD’S BEST FITNESS EQUIPMENT, AND TODAY WE BELIEVE WE’RE DOING IT!”

-FRANK TRULASKE

Today True also produces award-winning exercise bikes, ellipticals, and TrueStretch, our patented flexibility unit.

True Fitness is dedicated to always staying a step ahead of the competition and supplying its valued customers with the finest workout equipment in the industry. True’s equipment is designed to accommodate the needs of everyone from the professional athlete to the weekend warrior.

So, with a solid 25 years of fitness experience, you can count on True Fitness both now and in the future to meet your goals for a happy, healthy lifestyle.

When using this exercise machine, basic precautions should always be followed, which includes the following:

Read and understand all instructions and warnings prior to use.

Obtain a medical exam before beginning any exercise program. If at any time during exercise you feel faint, dizzy, or experience pain, stop and consult your physician.

Obtain proper instruction prior to use.

Inspect the bike for incorrect, worn, or loose components and do not use until corrected, replaced, or tightened prior to use.

Do not wear loose or dangling clothing while using the bike.

Care should be used when mounting or dismounting the bike.

Read, understand, and test the emergency stop procedures before use.

Disconnect all power before servicing the bike.

Do not exceed maximum user weight of 350 lbs.



Keep children and animals away.

All exercise equipment is potentially hazardous. If attention is not paid to the conditions of equipment usage, death or serious injury could occur.

JUST GET ON AND RIDE!

The best way to learn to use the PS50 & PS100 Bikes is to keep pressing keys to see what happens — explore it at your own pace.

STARTING UP

- Begin pedaling.
 - The display will wake up and prompt for your weight, workout selection, and workout time.
 - Enter your workout parameters and press , or immediately press  for a quick start into a manual workout.
-

PAUSING YOUR WORKOUT

The PS100 bike will retain your workout data for about 15 seconds after you stop pedaling. The PS50 will pause indefinitely.

CHANGE THE DATA DISPLAY

Press the Change Display key to change the workout data display.

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Bike**

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RIDING YOUR BIKE

IN THIS CHAPTER:

GETTING COMFORTABLE
USING YOUR HEART RATE TO EXERCISE
USING THE CHEST STRAP
USING CONTACT HEART RATE
GETTING THE BEST RESULTS POSSIBLE

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Manual and Pre-Set Programs

Chapter 4: Heart Rate Control

Chapter 5: Designing an Exercise Program

Chapter 6: Care and Maintenance

GETTING COMFORTABLE

CHAPTER ONE: RIDING YOUR BIKE

The body weight setting does not affect the calorie expenditure calculation. Unlike treadmills or other weight-bearing exercises, calories burned during exercise biking does not change with different body weights.

Variations in human exercise efficiency are another potential source of error, with differences of plus or minus 10% common in the population.

SETTING YOUR WEIGHT



Adjust the seat so that when your leg is fully extended with your feet in the pedals, your knee is slightly bent.



SEAT ADJUSTMENT

While standing next to the bike, pull out the seat adjust knob and lower the seat to the lowest position. Next, get onto the bike with one leg fully extended in a pedal, supporting most of your weight. Grasp the horn of the seat and pull it up under you to a snug fit, letting the ratcheting mechanism lock the knob and pin in place.



UPRIGHT BIKE SEAT ADJUSTMENT

FOOT POSITION

Riders are most efficient if they place the ball of their foot in the center of the pedal.



Other riders are more comfortable if the arch of their foot is against the pedal. Riders are encouraged to be as efficient as possible, but use your own judgement in the comfort/efficiency tradeoff.

PEDAL CADENCE

Most riders will find a comfort/efficiency sweet spot at a pedal cadence around 80 rpm. More serious riders desiring maximum performance typically pedal at around 100 rpm. For electromechanical and safety reasons, the bike will not provide the fully requested workload when your pedal cadence falls below 55 rpm.

BREATHING

Breathe in a regular and relaxed manner. Many exercisers do not breathe enough, which reduces their exercise capacity and comfort. You might want to try breathing deeper and more frequently to see if it helps your exercise regime.

MONITORING YOUR HEART RATE

CHAPTER ONE: RIDING YOUR BIKE

The PS50 & PS100 Bike has two ways of monitoring your heart rate:

...By using a chest strap that transmits your heart rate to the bike via radio...



...or by using the metal contact heart rate pads on the handlebars.



UPRIGHT HRC PADS



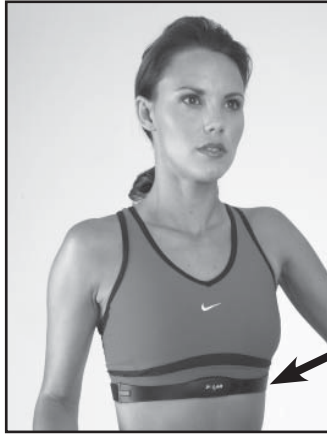
RECUMBENT HRC PADS

Although your bike functions fine without using the heart rate monitoring feature, this kind of monitoring gives you valuable feedback on your effort level. Chest strap monitoring also allows you to use Heart Rate Control, which is the most advanced exercise control system available.

MONITORING YOUR HEART RATE

CHEST STRAP HEART RATE MONITORING

When you wear a Polar® or compatible transmitter strap, the bike will display your heart rate as a digital beats-per-minute (bpm) readout.



The transmitter strap should be worn directly against your skin, about one inch below the pectoral muscles/breast line (see picture below). Women should be careful to place the transmitter below their bra line.

Some moisture is necessary between the strap and your skin. Sweat from your exercise works best, but ordinary tap water may be used prior to your workout if desired.

Examples of Heart Rates Found in Daily Life

An average 30-year-old might have a resting heart rate, when sitting totally still for several minutes, of 65. During hard exercise that can be sustained for 10 to 15 minutes it might be around 140 continuously. A maximum heart rate that requires maximal exercise for several minutes to attain is 185.

A 30-year-old in good shape might have a resting heart rate near 55, and might exercise for 20 minutes at a heart rate of 160.

A world-class distance runner or professional cyclist might have a resting heart rate near 45.

CONTACT HEART RATE

CHAPTER ONE: RIDING YOUR BIKE

The contact heart rate system lets you monitor your heart rate without wearing a strap.

Gently grasp the contact heart rate pads as shown below.



When the system detects your hands, a red heart will appear in the Heart Rate field of the data display and will flash in time with your heart beat. During this time, the system is analyzing and locking in your heart rate. Within about 15 seconds, your digital heart rate in beats per minute (bpm) should be displayed.

A Note on CHR Accuracy

CHR monitoring may be a bit less accurate than a chest strap, since the heart rate signals are much stronger at the chest.

About 5% of the population cannot be picked up by any CHR system. This is because their heart is positioned in a more up-and-down manner in their chest, as opposed to leaning over to one side.

CONTACT HEART RATE (CHR)

FOR BEST RESULTS

1. Exercise with smooth body motions. Avoid excessive body motion, especially in your arms and upper body.
2. Breathe smoothly and regularly, and avoid talking. (Talking will cause unrepresentative heart rate spikes of 5 to 10 bpm.)
3. Grip the pads lightly, not tightly.
4. Make sure your hands are clean, free of both dirt and hand lotions.

When using a Heart Rate Control (HRC) workout, it is best to use chest strap monitoring. These workouts work best with the extra accuracy gained from a chest-contact heart rate monitoring system.

THE DISPLAY

IN THIS CHAPTER:

YOUR DISPLAY
THE UPPER PANEL
THE LOWER PANEL

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Manual and Pre-Set Programs

Chapter 4: Heart Rate Control

Chapter 5: Designing an Exercise Program

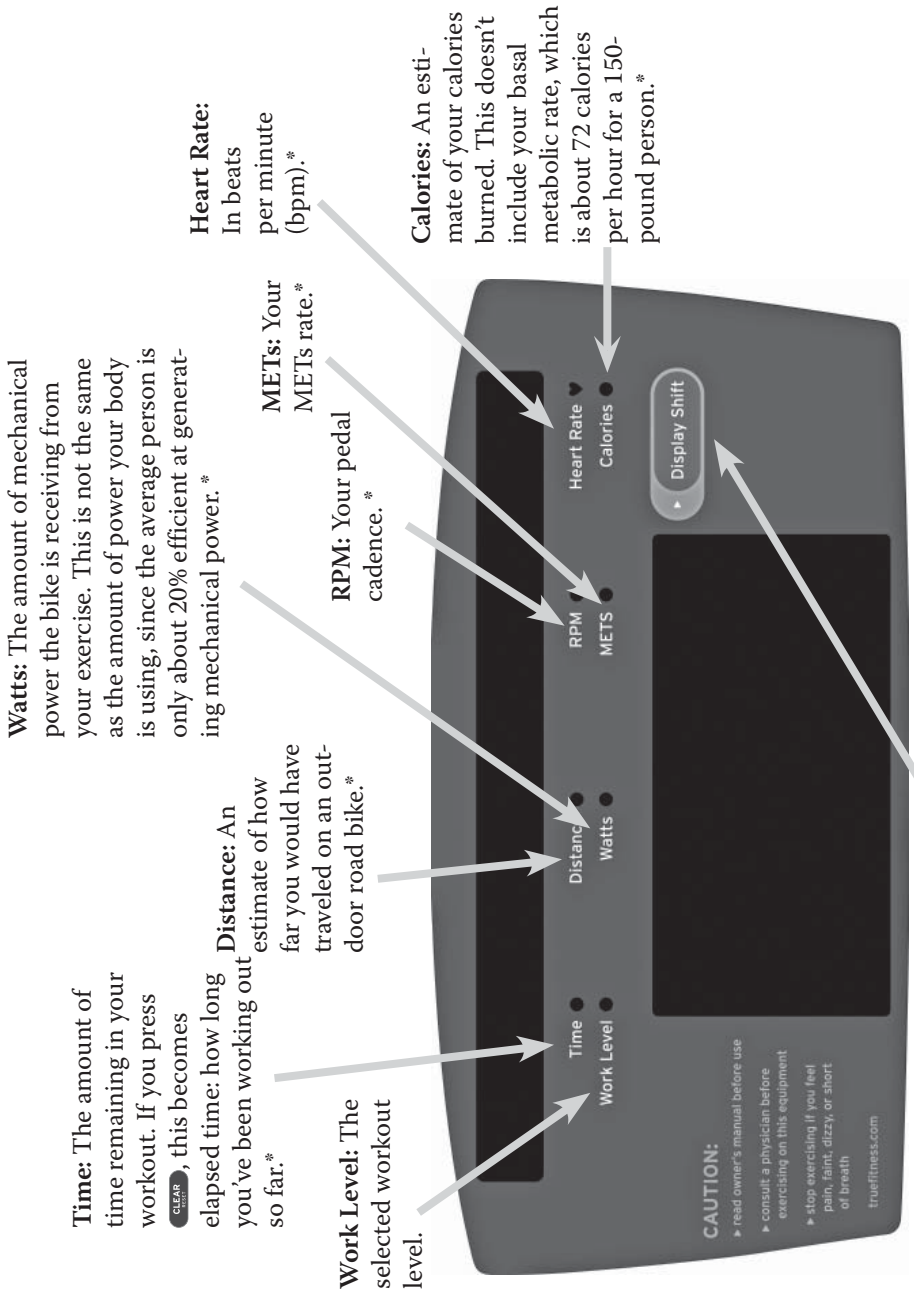
Chapter 6: Care and Maintenance

YOUR DISPLAY

CHAPTER TWO: THE DISPLAY

The bike display has two jobs: to let you control the bike operation, and to give you feedback about your workout. The controls are simple and designed to be foolproof; it's hard to press a "wrong" key. You can monitor eight different kinds of physiological data, and your workout progress is tracked graphically with the center matrix display

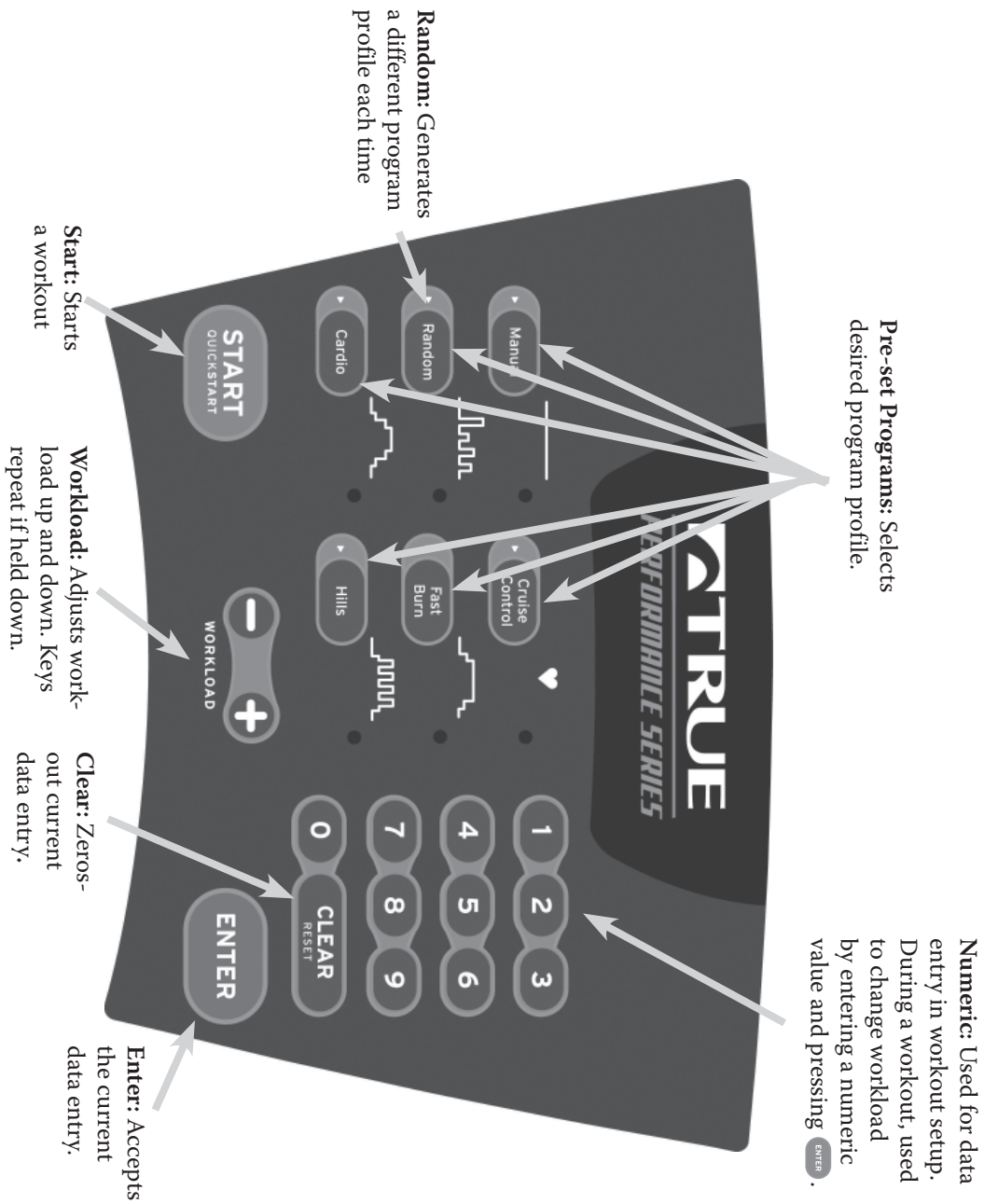
YOUR DISPLAY



*Pressing the “**Display Shift**” key switches the readout from the top values to the bottom values and will light up the LEDs of the values now being displayed. If you press and hold the “**Change Display**” key for one second, the display will enter “**Scan Mode**” and switch between the two sets of values.

THE LOWER PANEL

CHAPTER TWO: THE DISPLAY



MANUAL AND PRE-SET PROGRAMS

IN THIS CHAPTER:

HOW THESE MODES WORK

PROGRAM PROFILES

HOW YOUR BIKE CONTROLS YOUR WORKOUT

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Manual and Pre-Set Programs

Chapter 4: Heart Rate Control

Chapter 5: Designing an Exercise Program

Chapter 6: Care and Maintenance


HOW THESE MODES WORK

CHAPTER THREE: MANUAL AND PRE-SET PROGRAMS

Manual control mode changes workload in 10-watt increments. The workload stays the same at any pedal cadence (called constant power control) unless you drop below 55 rpm. Below 55 rpm, workload is reduced along with pedal cadence, to prevent the sensation of the pedals “locking up.”

Three different preset programs are available:

- ***C-V Workout***, with the workload gradually rising until you reach the middle of your workout time, then gradually decreasing to the end.
- ***Weight Loss***, with a warmup stage increasing to a steady-state workload for the majority of the workout, then a cool-down at the end.
- ***Hill Interval***, with four work intervals separated by four rest intervals.

The Random program creates a different program profile each time you press the  key.

Sixteen different levels are available to change the difficulty of a program. The workload intensities expand and contract depending on the level.

MANUAL
MODE

PRE-SET
PROGRAMS

PROGRAM
PROFILES



C-V WORKOUT



WEIGHT LOSS



HILL INTERVAL

HEART RATE CONTROL

IN THIS CHAPTER:

CONSTANT HRC
HRC OPTIONS AND INFORMATION
TARGET HEART RATE CHART
HEART RATE CONTROL PROGRAMS
IMPORTANT POINTS ABOUT HRC

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Manual and Pre-Set Programs

Chapter 4: Heart Rate Control

Chapter 5: Designing an Exercise Program

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HOW THESE MODES WORK

CHAPTER FOUR: HEART RATE CONTROL

True's heart rate control (HRC) workout lets the bike monitor your relative exercise intensity by way of your heart rate, then automatically adjust the workload to keep you at your desired exercise intensity.

Your heart rate is a good measure of your body's exercise stress level. It reflects differences in your physical condition, how tired you are, the comfort of the workout environment, even your diet and emotional state. Thus, using heart rate to control workload takes the guesswork out of your workout settings.

Consult your physician before using heart rate controlled workouts for advice on selecting a target heart rate range. Also, it is important to use the bike for several workouts in the manual mode while monitoring your heart rate. Compare your heart rate with how you feel to ensure your safety and comfort.

You need to wear a heart rate monitoring chest strap to use heart rate control. See the "Monitoring Your Heart Rate" section in *Chapter 1* for a guide to proper usage.



CONSTANT HRC

TYPES OF HRC

The PS50 & PS100 Bike has two types of heart rate control:

- **Constant:** pick a target heart rate, and the bike will control your workout from the very beginning so that you reach your target within five to seven minutes.
- **Cruise Control:** while in any program, set your current heart rate as your target by pressing a single key.

MAXIMUM HEART RATE AND TARGET HEART RATE

Remember to check with your physician before beginning any exercise program. She can help determine an appropriate target heart rate. Medications often affect heart rate.

HEART RATE CONTROL PROGRAMS

CHAPTER FOUR: HEART RATE CONTROL


Constant HRC is the best-known type of HRC, and is the easiest to use. The bike will gradually raise your heart rate so that you reach your target within 5 to 7 minutes.

Note that as you tire during your workout, especially in the last third, workload will usually have to be reduced to keep you at a steady target heart rate.

Cruise Control is the simplest way to enter Constant HRC training. While in manual or any program you can enter Constant HRC by simply pressing the Heart Rate Control key. Your current heart rate will be set as the target.

For best results, you should be at least five minutes into your workout and warmed up. This will allow Cruise Control to more accurately control your heart rate.

Remember, you must be wearing a chest strap, and your heart rate should be displayed in the Heart Rate window.

To change your target heart rate press Heart Rate Control. Edit the target using  /  or numeric keys and press  .

**CONSTANT
HRC**

**CRUISE
CONTROL**

TARGET
HEART RATE
TIPS

The heart rate monitor transmitter strap should be worn according to the guidelines in *Chapter 1*.

If the transmitter strap is adjusted or moved while exercising, heart rate monitoring may be temporarily affected.

If communication is lost for 30 seconds, the bike will exit the HRC workout into a manual workout.

The transmitter strap sends a low-level radio signal to the bike, so interference from other radio and sound waves (including everything from cordless telephones to loudspeakers) is possible. The good news is that this interference is usually quite brief. If you continue to have intermittent heart rate display problems, consult your local service technician, as the transmitter strap batteries may be low.

Make sure you breathe smoothly and regularly.

Talking during your workout usually causes heart rate spikes of five beats per minute or more, so avoid talking as much as possible.

Maintain a smooth walking or running motion.

Two users wearing the same kind of transmitter at the same time and in close proximity may cause false heart rate display readings.

DESIGNING AN EXERCISE PROGRAM

IN THIS CHAPTER:

THE F.I.T. CONCEPT DEFINED
UTILIZING THE F.I.T. CONCEPT
BEGINNING YOUR F.I.T. PROGRAM
ESTABLISHING AND MAINTAINING FITNESS
WEIGHT MANAGEMENT
A SPORTS TRAINING PROGRAM

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Manual and Pre-Set Programs

Chapter 4: Heart Rate Control

Chapter 5: Designing an Exercise Program

Chapter 6: Care and Maintenance

THE F.I.T. CONCEPT DEFINED

CHAPTER FIVE: DESIGNING AN EXERCISE PROGRAM

The workout portion of your exercise program consists of three major variables: Frequency, Intensity, and Time.

Frequency: How Often You Exercise

You should exercise three to five times a week to improve your cardiovascular and muscle fitness. Improvements are significantly smaller with less frequent exercise.

Intensity: How Hard You Exercise

Intensity of exercise is reflected in your heart rate. Exercise must be sufficiently rigorous to strengthen your heart muscle and condition your cardiovascular system. Only your doctor can prescribe the target training heart range appropriate for your particular needs and physical condition.

Start with exercise that stimulates you to breathe more deeply.

Alternate days of moderate and easy exercise to help your body adapt to new levels of exertion without unnecessary strain.

If you are just beginning an exercise program, you may be most comfortable using your bike at low workloads. As you use your bike regularly, higher workloads may be more comfortable and more effective.

If you feel out of breath before you have exercised 12 minutes, you are probably exercising too hard.

WHAT IS
THE F.I.T.
CONCEPT?

As your fitness level improves, you will need to increase your workout intensity in order to reach your target heart rate. The first increase may be necessary after two to four weeks of regular exercise. Never exceed your target heart rate zone. Increase the workload on the bike to raise your heart rate to the level recommended by your doctor.

METs

One MET is the amount of energy your body uses when you're resting. If a physical activity has an equivalent of six METs, its energy demands are six times that of your resting state. The MET is a useful measurement because it accounts for differences in body weight.

Time: How Long You Exercise

Sustained exercise conditions your heart, lungs, and muscles. The longer you are able to sustain exercise within your target heart range, the greater the aerobic benefits.

To begin, maintain two to three minutes of steady, rhythmic exercise and then check your heart rate.

The initial goal for aerobic training is 12 continuous minutes.

Increase your workout time approximately one or two minutes per week until you are able to maintain 20-30 continuous minutes at your training heart rate.

UTILIZING THE F.I.T. CONCEPT

CHAPTER FIVE: DESIGNING AN EXERCISE PROGRAM

The F.I.T. concept is designed to help you begin a program tailored to your needs. You may wish to keep an exercise log to monitor your progress.

You can get valuable fitness benefits from your True Bike. Using the bike regularly may increase the ability of your heart and lungs to supply oxygen and nutrients to exercising muscles over an extended period of time. The bike will also help you develop added muscle endurance and balanced strength throughout your body.

Calculate your maximum heart rate as a first step in developing your fitness program. One formula to calculate average maximum heart rate for one minute is:

$$220 - \text{Age}$$

To find your pulse, locate a vein on your neck or inside your wrist, then count beats for ten seconds, then multiply by six.

It's also important to know your target training zone or target heart rate. The American College of Sports Medicine (ACSM) suggests 55% to 65% for lower-conditioned users, 75% to 80% for moderately conditioned users, and up to 90% for well-conditioned users.

USING
THE F.I.T.
CONCEPT

YOUR
FITNESS
PROGRAM

DETERMINING
YOUR NEEDS

In addition to monitoring your heart rate as you exercise, be certain of how quickly your heart rate recovers. If your heart rate is over 120 beats per minute five minutes after exercising, or is higher than normal the morning after exercising, your exertion may be too strenuous for your current level of fitness. Reducing the intensity of your workout is recommended.

The age-adjusted target heart rates indicated in the chart in *Appendix A* reflect averages. A variety of factors (including medication, emotional state, temperature, and other conditions) can affect the exercise heart rate appropriate for you.

Warning: Consult your doctor to establish the exercise intensity (target heart rate zone) appropriate for your age and condition before beginning any exercise program.

Warm-Up: Slow and Deliberate Exercise

You are not warmed up until you begin to perspire lightly and breathe deeper. Warming up prepares your heart and other muscles for more intense exercise and helps you avoid premature exhaustion. Start slowly, exploring different workloads until you can comfortably sustain your exercise level. A good suggestion is a minimum of three minutes. Perspiration on your brow is a good indicator of a thorough warm-up. The older you are, the longer your warm-up period should be.

YOUR F.I.T. CONCEPT CONTINUED

CHAPTER FIVE: DESIGNING AN EXERCISE PROGRAM

Workout: Brisk and Rhythmic Exercise

The workout trains and conditions your heart, lungs, and muscles to operate more efficiently. Increase exercise in response to your heart rate to train and strengthen your cardiovascular system. Concentrate on exercising smoothly.

Cool-Down: Slow and Relaxed Exercise

Cooling down relaxes your muscles and gradually lowers your heart rate. Slowly reduce your workload until your heart rate is below 60 percent of your maximum heart rate. The cool down should last at least five minutes, followed by some light stretching to enhance your flexibility.

Beginning a Fitness Program

If you cannot sustain 12 continuous minutes in your target heart rate zone, exercise several times a day to get into the habit of exercising.

Try to reach and maintain 60-65 percent of your maximum heart rate. Alternate exercise with periods of rest until you can sustain 12 continuous minutes of exercise at 60-65 percent of your maximum heart rate.

Begin exercising in three to five minute sessions.

**ESTABLISHING
AEROBIC
FITNESS**

If you can sustain 12 but not 20 continuous minutes of exercise in your target heart rate zone:

Exercise three to five days a week.

Rest at least two days per week.

Try to reach and maintain 60-75 percent of your maximum heart rate with moderate rhythmic exercise.

Begin with 12 continuous minutes. Increase your time by one to two minutes per week until you can sustain 20 continuous minutes.

**MAINTAINING
AEROBIC
FITNESS**

If you can sustain 20 continuous minutes in your target heart rate zone, begin to increase the length and intensity of your workout:

Exercise four to six days a week or on alternate days.

Try to reach and maintain 70-85 percent of your maximum heart rate with moderate to somewhat hard exercise.

Exercise for 20-30 minutes.

WEIGHT MANAGEMENT

CHAPTER FIVE: DESIGNING AN EXERCISE PROGRAM

Consistent aerobic exercise will help you change your body composition by lowering your percentage of body fat. If weight loss is a goal, combine an increase in the length of your workouts with a moderate decrease in caloric intake. For weight control, how long and how often you exercise is more important than how hard you exercise.

Exercise four to five times a week.

Try to reach and maintain 60-75 percent of your maximum heart rate with moderate exercise.

Exercise for 30-45 minutes at 60-65 percent of your target heart rate.

Here are some tips to achieving your weight management goal:

Consume most of your dietary calories at breakfast and lunch, and eat a light dinner. Do not eat close to bedtime.

Exercise before meals. Moderate exercise will help suppress your appetite.

Take exercise breaks throughout the day to help increase metabolism (calorie expenditure).

MANAGING WEIGHT

SPORTS TRAINING

When you are training to improve strength and performance:

Exercise four to five days a week. Alternate exercise days and intervals of hard to very hard exercise with easy to moderate exercise.

Exercise for 30 minutes or longer.

Warning: these strategies are intended for average healthy adults. If you have pain or tightness in your chest, an irregular heartbeat, shortness of breath or if you feel faint or have any discomfort when you exercise, **Stop!** Consult your physician before continuing. Remember, every workout should begin with a warm-up and finish with a cool-down.

CARE AND MAINTENANCE

IN THIS CHAPTER:

HOW TO CARE FOR YOUR BIKE

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Manual and Pre-Set Programs

Chapter 4: Heart Rate Control

Chapter 5: Designing an Exercise Program

Chapter 6: Care and Maintenance

THE F.I.T. CONCEPT DEFINED

CHAPTER SIX: CARE AND MAINTENANCE

Your PS50 & PS100 Bike doesn't require any routine maintenance, not even lubrication. Keeping it clean is the most important task.

After every workout: Perspiration should be wiped from the control console, contact heart rate pads, shrouds, and seat.



Weekly: Wipe down your PS50 & PS100 Bike once a week with a water-dampened soft cloth. On the contact heart rate pads, use a glass cleaning solution. Be careful not to get excessive moisture between the edge of the overlay panel and the console, as this might create an electrical hazard or cause the electronics to fail.

Expert service and maintenance at a reasonable cost are available through your factory-trained, authorized True Fitness dealer. The dealer maintains a stock of repair and replacement parts and has the technical knowledge to meet your service needs.

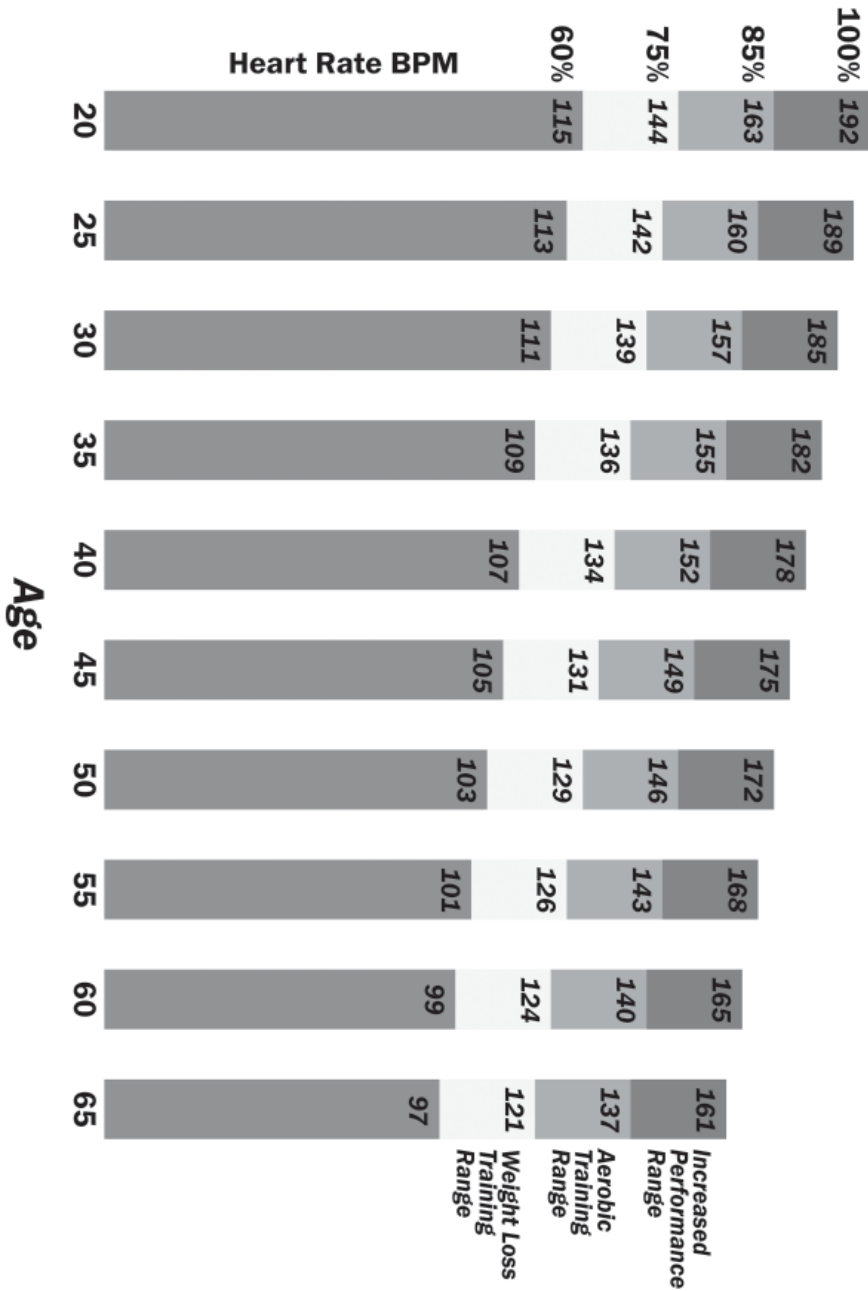
HOW TO CARE FOR YOUR BIKE

APPENDIX A

MAXIMUM HEART RATE AND TARGET HEART RATE

APPENDIX A

TARGET HEART RATE CHART



**CHECK
WITH YOUR
PHYSICIAN**

Remember to check with your physician before beginning any exercise program. She can help determine an appropriate target heart rate. Medications often affect heart rate.

APPENDIX B

SPECIFICATIONS

APPENDIX B

Workload Range: 30 – 450 watts. (PS100); 30 - 350 watts.

Weight: Recumbent, 180 pounds.

Maximum User Weight: 350 pounds.

Workload Control System: self-generating hybrid brake.

SPECIFICATIONS

Specifications and operation subject to change without notice.



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