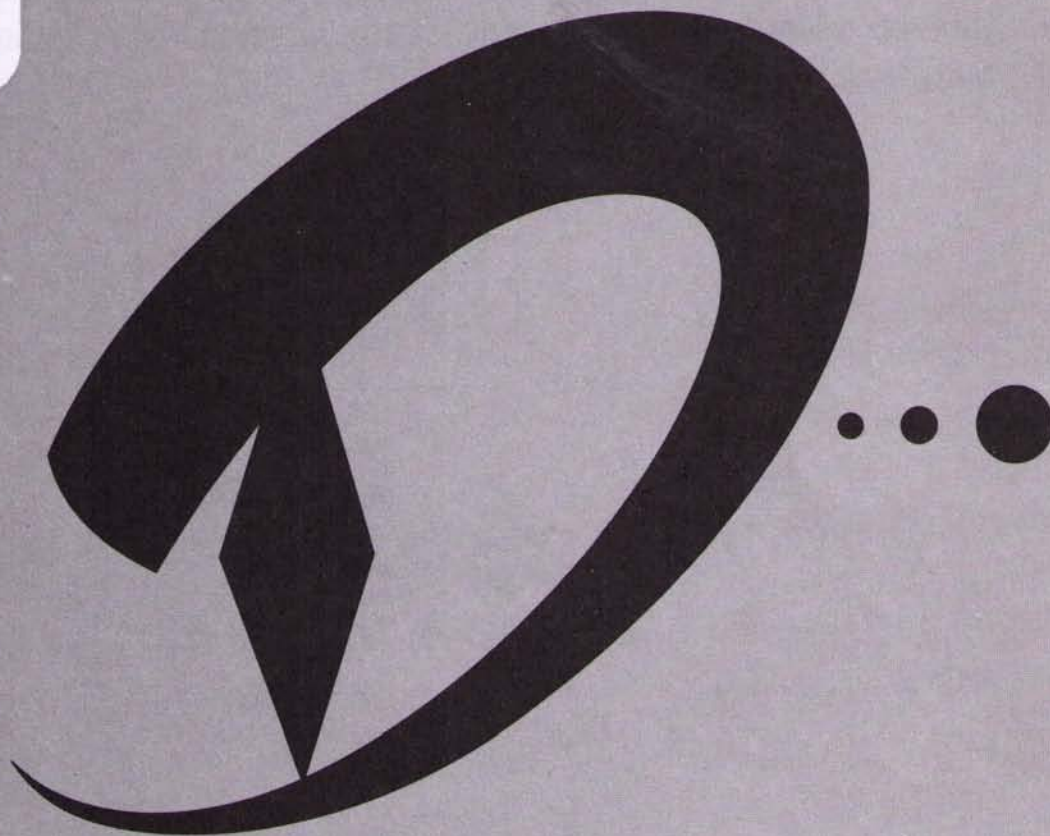


Owner's Manual & Assembly

# 1100 SERIES

1100U | 1100R | 1100ES | 1100EL



**DIAMONDBACK**

**Fitness**



# Purchaser's Reference Information

IT IS IMPERATIVE THAT YOU FILL IN THE FOLLOWING INFORMATION AND REFER TO IT SHOULD THE NEED FOR SERVICE ARISE.

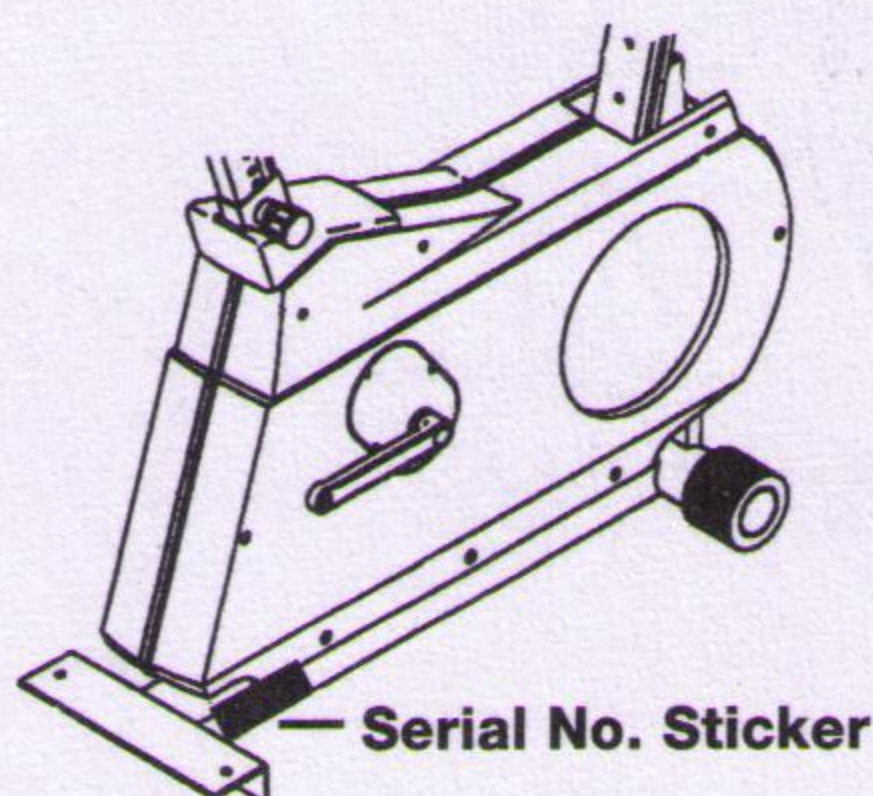
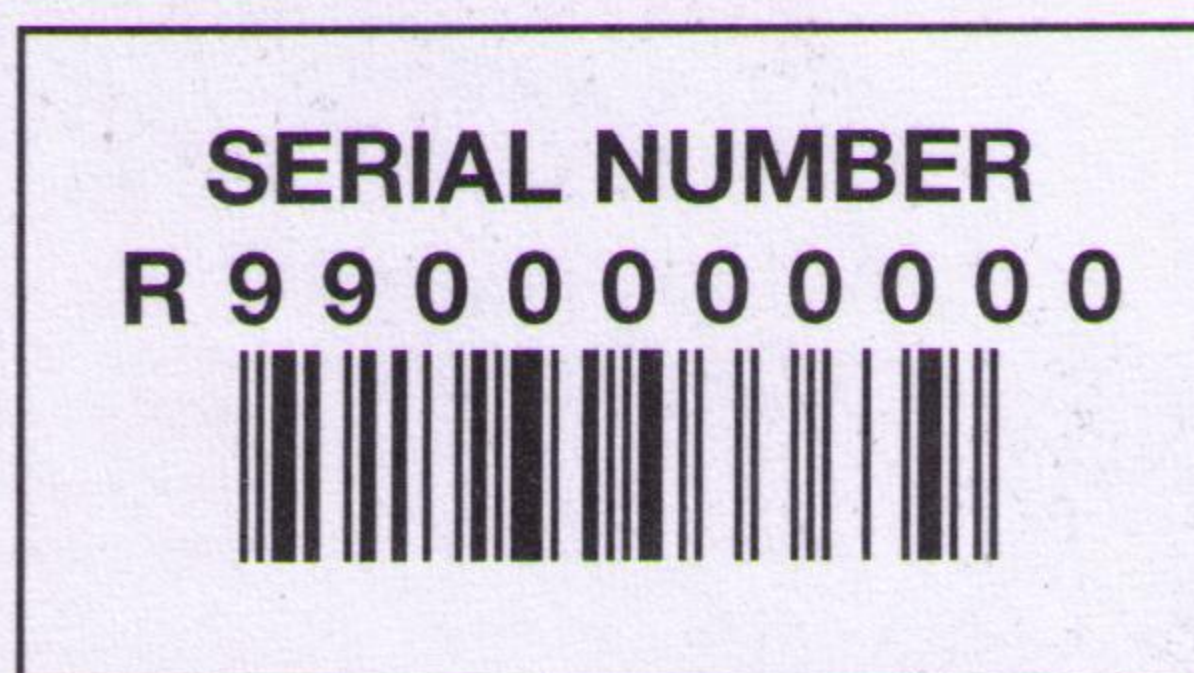
Product Name: *Diamondback 1100 Series (Upright / Recumbent / Stepper / Elliptical)*

Serial Number: **R** \_ \_ \_ \_ \_

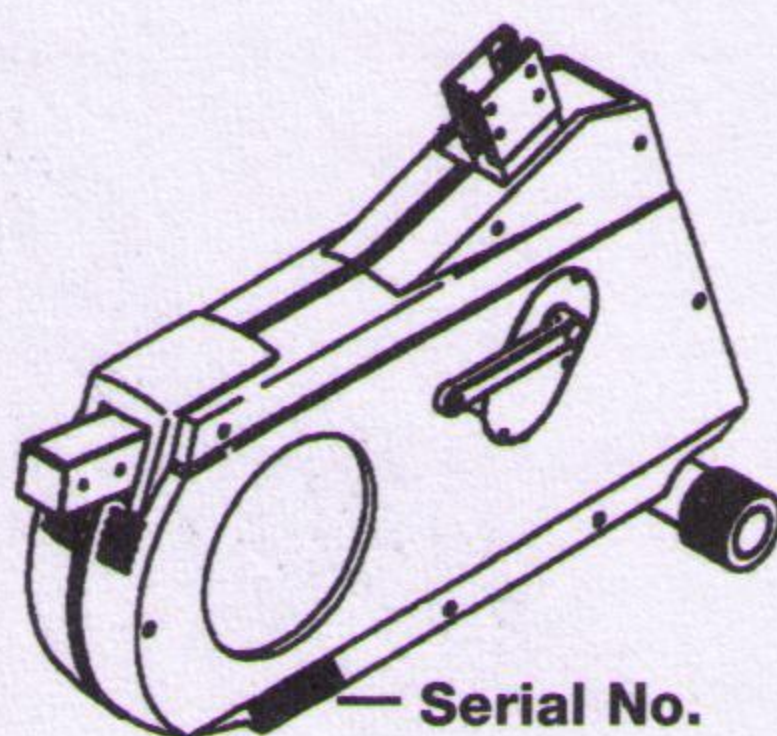
## To Activate Warranty:

**COMPLETELY FILL OUT THE ATTACHED WARRANTY CARD (SEE BACK COVER) AND RETURN TO DIAMONDBACK WITHIN 15 DAYS OF THE DATE OF PURCHASE. FAILURE TO COMPLY WITH THE WARRANTY ACTIVATION PROCEDURE MAY VOID THE MANUFACTURER'S WARRANTY.**

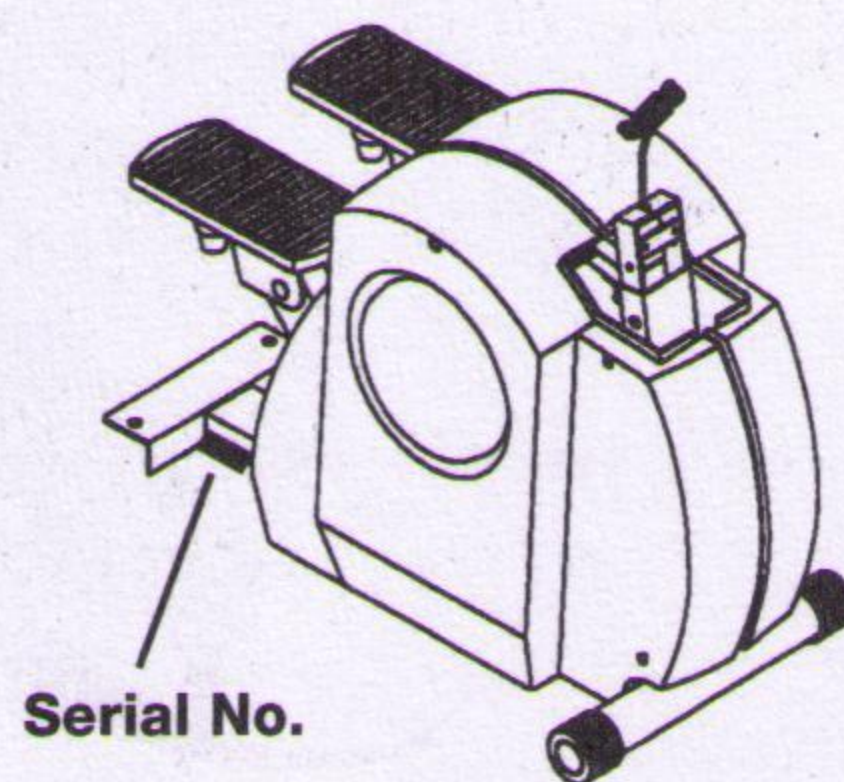
### Serial Number Location



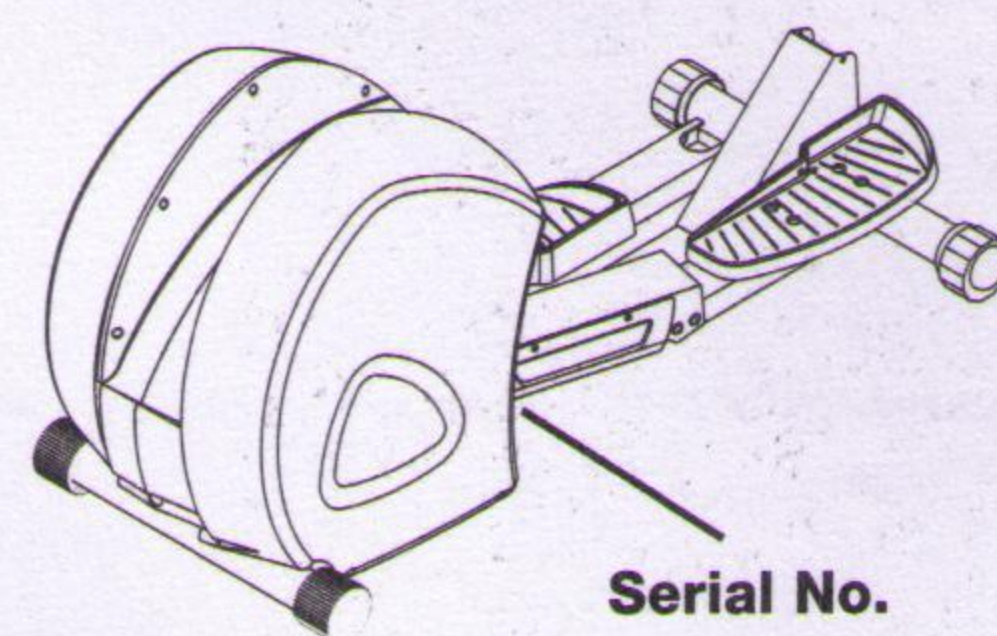
*1100U Upright*



*1100R Recumbent*



*1100ES Stepper*



*1100EL Elliptical*

Dealer Name: \_\_\_\_\_

Dealer Address: \_\_\_\_\_

Dealer Phone Number: (\_\_\_\_) \_\_\_\_\_

Dealer Contact Name: \_\_\_\_\_

Date Purchased: \_\_\_\_\_

## Shipping Materials

*Diamondback recommends that you retain the original packing materials (box and packing items) for future shipping needs.*



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## **DIAMONDBACK**

### ***Fitness***



# Introduction

## Good health is an exercise in common sense.

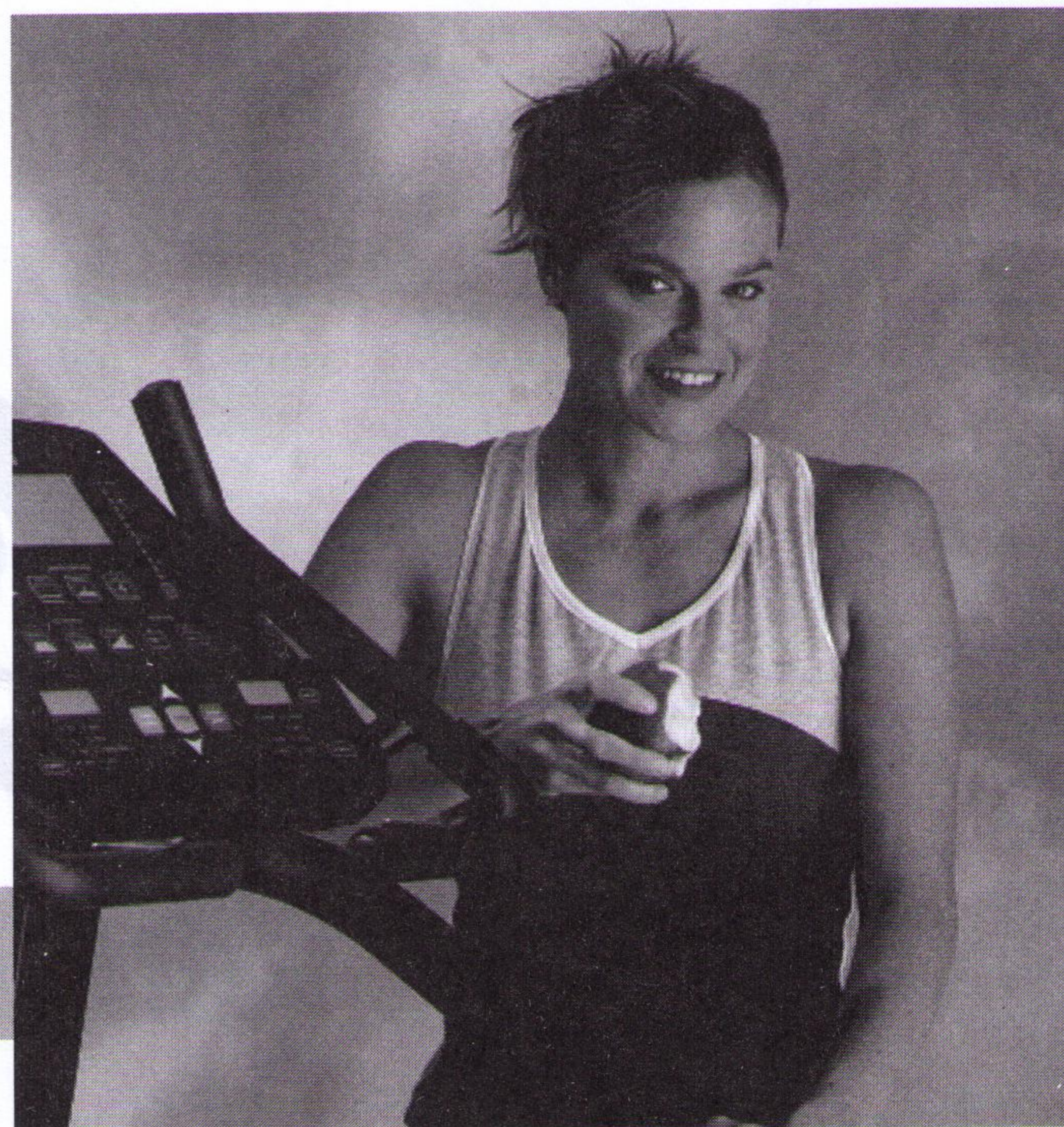
The basics of good health are really common sense. Eat right, drink lots of water, get enough sleep, and exercise at least 3-4 times a week. It may sound simple, but to achieve the look and vitality most health-conscious men and women want, takes more discipline than most people are willing to endure. Having fitness equipment in your home makes it easier to achieve your goals. And having Diamondback equipment gives you even more of an edge. Because when your equipment is comfortable, simple and effective, you exercise more. And that means better results.

**A workout that works for you.** To maintain cardiovascular fitness, the American Heart Association recommends that you exercise 3 to 4 days a week at 60%-75% of your maximum heart rate. By monitoring your heart rate while you exercise, you can get the most effective workout in the least amount of time. It's the easiest way of determining if you're exercising at a safe and effective level. Of course, if you want to lose weight or reach a higher level of athletic conditioning, working out 5 to 6 times a week will help you achieve that goal faster.

## Get a smart start on exercising.

1. Always stretch before your workout to loosen muscles, and afterwards to cool down.
2. The first few minutes of your workout should be devoted to warming up muscles before a vigorous workout, and building your heart rate slowly.
3. After your aerobic workout of about 24-32 minutes, spend 10 minutes gradually reducing your heart rate with a lower resistance level.

**Remember, start slow, with intensity low, until you build endurance and strength. And always consult your physician before beginning any exercise program.**



## Glossary of Terms

**LED's =** The lights on the face of the console.

**METs =** A measure of energy expenditure. The METs program allows the bike to be electronically controlled to deliver a specific work rate independent of pedal rate. As the pedal rate falls, the load on the wheel is increased proportionally. As the pedal rate intensifies, the load on the wheel is decreased proportionally.

**Programs =** Quick Start, Manual, Random, METs, Fatburner, Interval, Strength, Test / Fitness Level, Custom / Target

**Stage =** Represented by a vertical column of lights on the dot matrix screen.

**Watts =** The amount of energy currently being expended.

**Work =** The amount of energy expended during exercise.



# Safety Instructions & Warnings

The 1100 series is built for optimum safety and is designed to meet or exceed all domestic and international standards. However, certain precautions need to be followed when operating any exercise equipment. **BE SURE TO READ THE ENTIRE OWNER'S MANUAL BEFORE OPERATING YOUR 1100 SERIES UNIT.**

**ATTENTION - DO NOT OPERATE THE HEART RATE MONITOR TRANSMITTER TOGETHER WITH AN ELECTRICAL HEART PACEMAKER. THE TRANSMITTER MAY CAUSE ELECTRICAL DISTURBANCES.**

## **CAUTION - FOR SAFE OPERATION**

1. Keep your hands and feet away from all moving parts.
2. Before beginning any exercise program on the 1100 series equipment, it is important to consult with your physician if you have any of the following: History of heart disease, high blood pressure, diabetes, chronic respiratory diseases, elevated cholesterol, or if you smoke cigarettes or experience any other chronic diseases or physical complaints.
3. If over the age of 35 or overweight, consult with your physician before beginning an exercise program.
4. Pregnant women should consult with their physician before beginning an exercise program.
5. If you experience dizziness, nausea, chest pains or other abnormal symptoms during exercise, stop the exercise session immediately. Consult a physician before continuing.
6. Drink fluids if you exercise for twenty or more minutes on any 1100 series unit.

## **WARNING - TO REDUCE RISK OF INJURY TO YOURSELF OR OTHERS**

1. To ensure proper functioning of your 1100 series equipment, do not install attachments or accessories not provided or recommended by Diamondback.
2. Always wear proper clothing and shoes when exercising on any 1100 series unit.
3. User weight is not to exceed 300 pounds / 135 kilograms.
4. Keep children away from 1100 series equipment. Hands and feet may get caught in the pedals or other moving parts which could result in serious injury.
5. Place the 1100 series unit in an area that will meet minimum clearance requirements:
  - Front, Back & Sides: 4 feet / 30cm
6. Keep 1100 series equipment away from walls to allow proper ventilation. Air should be able to circulate freely around the units. Keep all air openings free of dirt and dust. Never insert anything into openings.
7. The 1100 series is intended for indoor use in the home or light commercial environment. It is not intended for outdoor use.
8. Place your 1100 series unit on a solid, level surface when in use.
9. Use the handlebars or handrails when getting on and off your 1100 series unit.
10. Never operate the unit if it is damaged or broken. Contact your local authorized Diamondback fitness dealer for service.
11. Make sure all components are fastened securely (i.e. seat post, saddle, handlebars, pedals) at all times.
12. **SAVE THIS OPERATING INSTRUCTIONS MANUAL.**



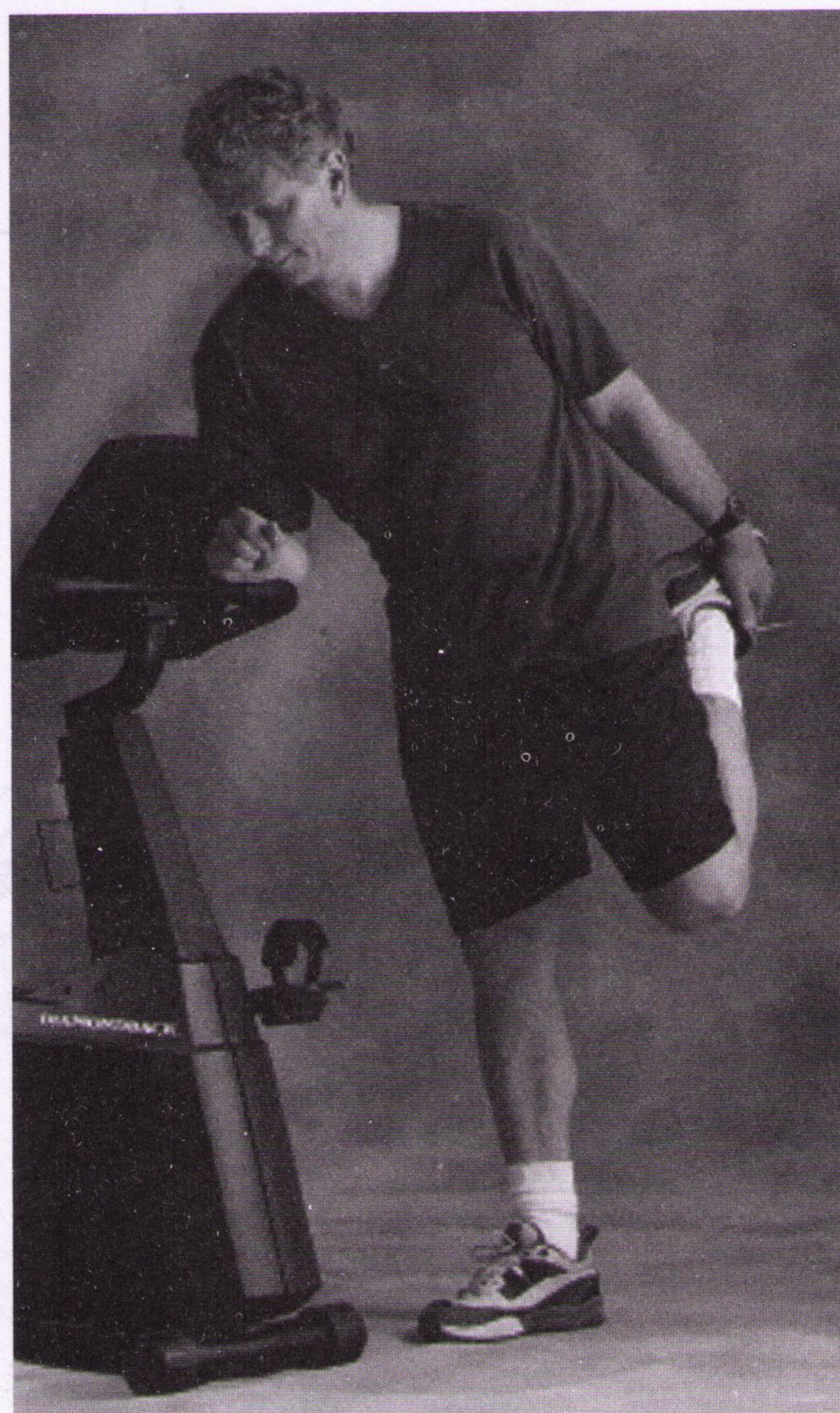
## **THE NEXT STEP**

*The fitness experts at Diamondback believe that*

## **IN WORKOUT**

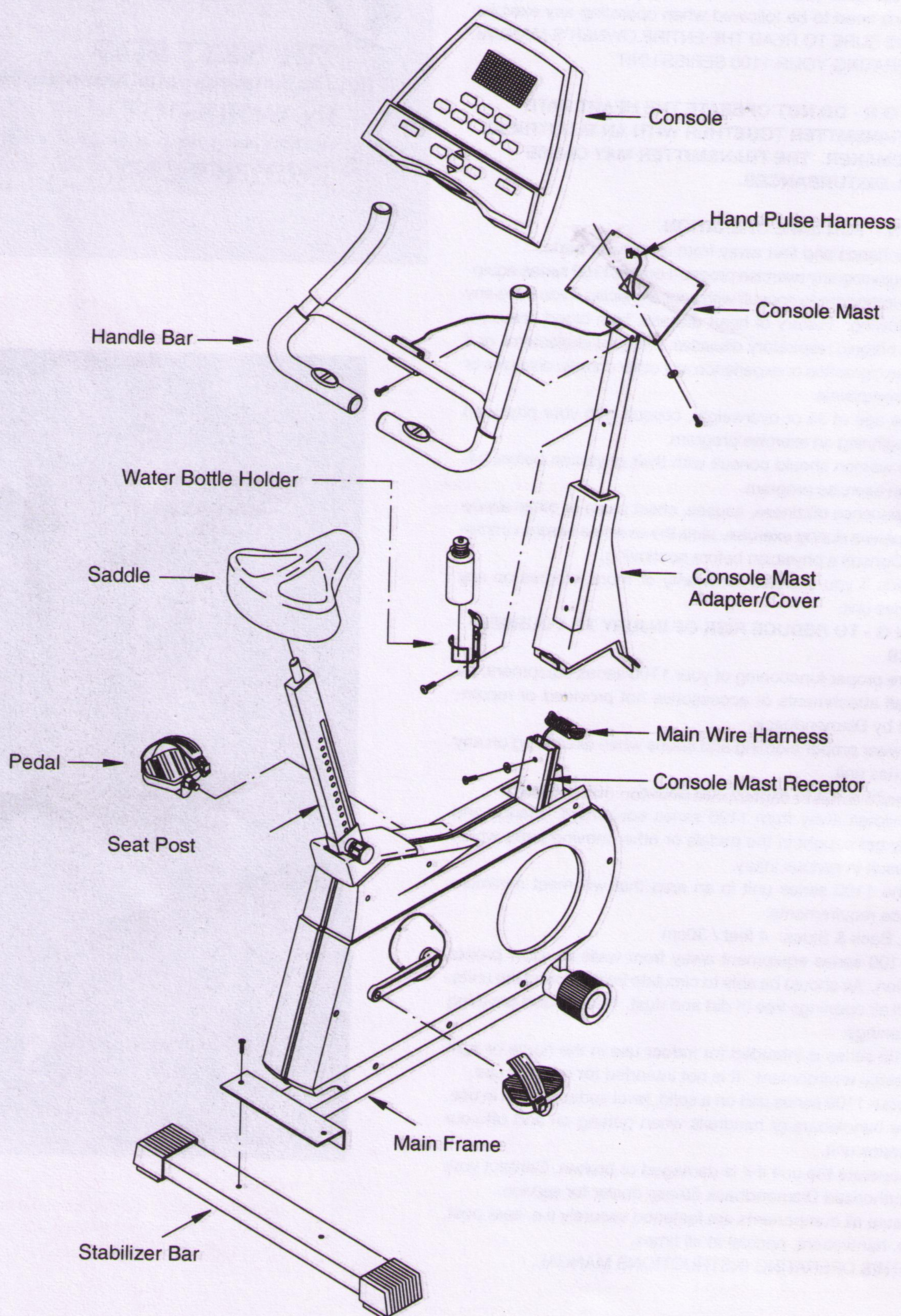
*working out is not just for athletes but for all people.*

## **TECHNOLOGY.**





# 1100U Assembly Drawing





# 1100U Assembly Instructions



## REACH YOUR FITNESS

The fitness experts at Diamondback believe that  
**GOALS WITH**  
working out is not just for athletes but for all people.  
**GREATER SPEED.**

### Frame Assembly

1. Unscrew two M8 x 20mm bolts from the rear stabilizer bar.
2. Place rear stabilizer bar under rear main frame body and align screw holes.
3. Insert and tighten the two M8 x 20mm screws using a 5mm Allen wrench.
4. Install seatpost by sliding it into seatpost receptor.

### Console Mast Assembly

1. Install console mast adapter/cover onto console mast.
2. Insert the main wire harness into the bottom opening of the console mast tube. Push the harness up the tube until the connector of the harness appears in the opening at the top of the tube.

#### **WIRING HARNESS INSTALLATION TIP:**

Straighten the loops of the wiring harness so that it can slide smoothly into the console mast. Hold the bottom of the console mast next to the console mast receptor and point the top of the console mast downward.

3. Install the console mast by sliding it into the console mast receptor while pulling the wire harness. This will keep the slack out of the harness so the wires will not get pinched and short out. Insert and tighten two M8 x 40mm screws and washers using a 5mm Allen wrench.
4. Snap console mast adapter/cover into top of sidecase.

### Handlebar

1. Insert the hand pulse harness through the opening of the console mast and out the top of the console mounting plate.
2. Assemble the handlebar onto the mount and insert and tighten the four M8 x 13mm screws using a 5mm Allen wrench. Be sure not to pinch the hand pulse harness during this procedure as this will damage the electronic console.

### Console Assembly

1. Connect both plugs, from the main wiring harness and hand pulse wiring harness, to the plug receptors on the backside of the console taking care to install correctly (see plug alignment marks).  
**WIRING HARNESS INSTALLATION HINT:** Any excess wiring must be carefully inserted ("stored") back into the console mast before installing the console onto the console mounting plate.
2. Fasten the console to the console mounting plate with the four M5 x 12mm screws and washers using a Phillips screwdriver.

### Saddle Assembly

1. Assemble saddle onto seatpost.
2. Tighten the affixing nut and washer using a 17mm open-end wrench.  
**SADDLE ANGLE ADJUSTMENT HINT:** Hold the rear of saddle in the optimum comfort position and tighten the nut at the same time.



5

### Pedals

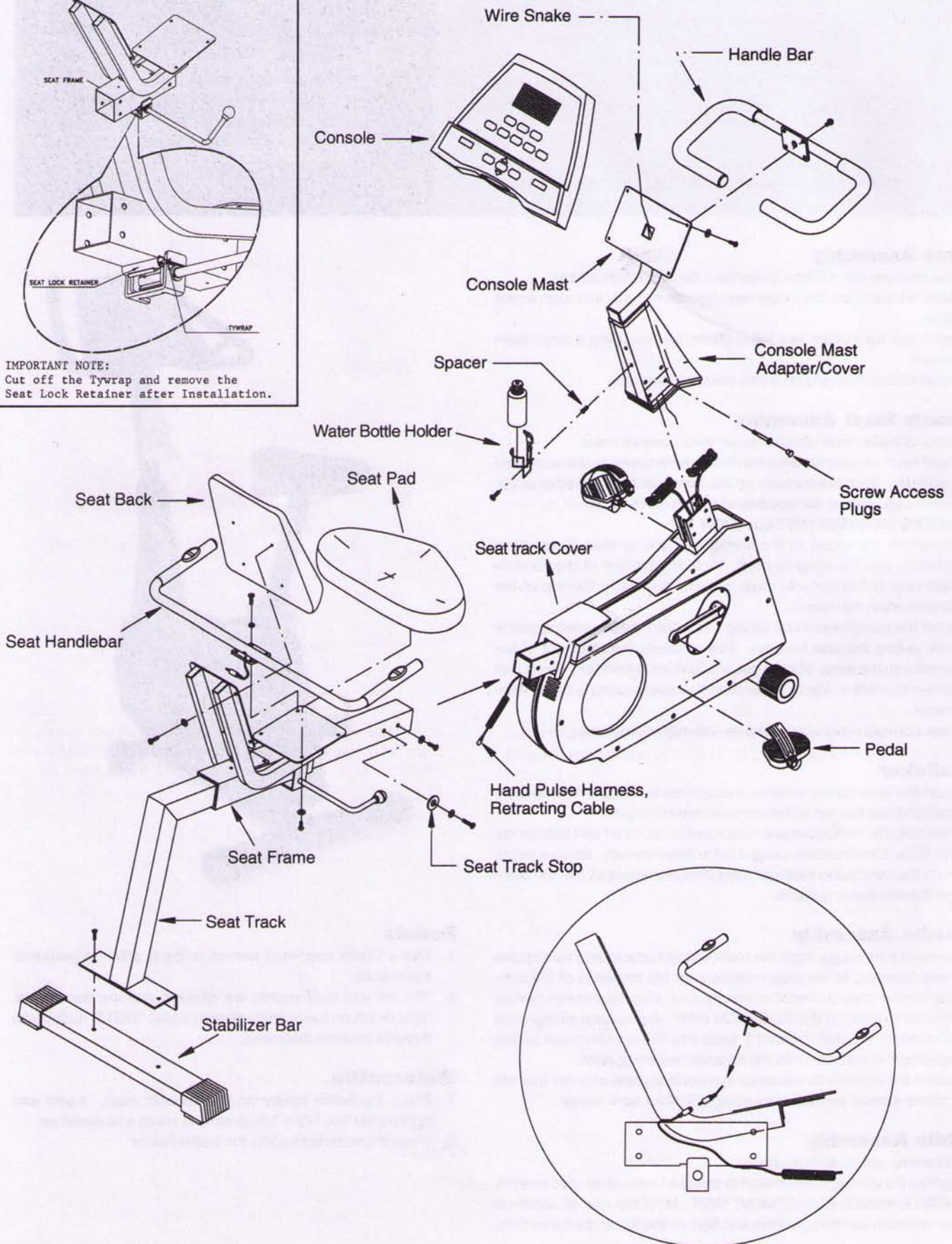
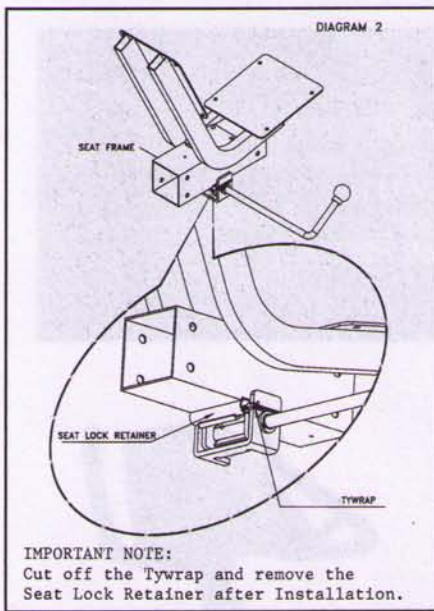
1. Use a 15mm open-end wrench to firmly affix the pedals to the cranks.
2. The left and right pedals are different and are denoted as right or left on the bottom of each pedal. NOTE: Left pedal threads counter-clockwise.

### Waterbottle

1. Place the bottle holder on the console mast. Insert and tighten the two M5 x 12mm screws using a screwdriver.
2. Snap the waterbottle into the bottle holder.



# 1100R Assembly Drawing







## YOU'LL BE VERY

The fitness experts at Diamondback believe that

## COMFORTABLE WITH

working out is not just for athletes but for all people.

## OUR AEROBIC BENEFITS.

### Rear Frame & Seat Assemblies

1. Unscrew two M8 x 20mm bolts from the rear stabilizer bar.
2. Remove the hand pulse harness which is stored in the seat track receiving tube. Assemble seat frame to seat track being careful not to cut the hand pulse harness during installation. Cut off tywrap and remove the seat lock retainer that holds the seat lock in the locked position (see diagram 2). Make sure to adjust the seat tightening mechanism so it will not bind with the seat track upon installation.
3. Install seat track assembly by sliding seat track onto seat track receptor. Securely fasten the seat track using two M8 x 15mm screws and the seat track stop using two M8 x 20 mm screws and washers with a 5mm Allen wrench. Take note that the seat track stops must be installed on the screws closest to the seat frame (see diagram). Do not overtighten.
4. Place rear stabilizer bar under the seat track and align the screw holes.
5. Insert and tighten two M8 x 20mm screws using a 5mm Allen wrench.
6. Snap the seat track cover onto the sidecase of the seat track receptor area.
7. Install the seat frame handlebar onto the seat frame using four M8 x 15mm screws and washers using a 5mm Allen wrench.
8. Connect the plug from the hand pulse wiring harness of the seat handlebar to the plug receptor of the retracting cable hanging out of the sidecase. Secure the hand pulse harness on the back and bottom of the seat frame by tightening the harness on the cord clamp with tywrap.
9. Install seat pads onto the seat frame using four 1/4" x 5/8" screws and washers (for each pad).

### Console Mast Assembly

1. Run both wiring harnesses through the console mast adapter/cover and install the console mast adapter/cover onto the sidecase.
2. Connect both hand pulse and main wiring harnesses to the wire snake and pull through the top (pull until just tight, DO NOT PULL HARD!!) WIRING HARNESS INSTALLATION HINT: Straighten the loops of the wiring harness so that it can slide smoothly into the console mast. Hold the bottom of the console mast next to the console mast adapter/cover.
3. Install the console mast by sliding it onto the console mast receptor. Insert and tighten all four of the M8 x 55mm screws using a 5mm Allen wrench through four holes of the console mast adapter/cover.
4. Cover the screw holes of the console mast adapter/cover with four screw access plugs.



### Console Assembly

1. Connect the plugs from the main wiring harness and hand pulse to the plug receptors on the backside of the console taking care to install correctly (see plug alignment marks). WIRING HARNESS INSTALLATION HINT: Any excess wiring must be carefully inserted ("stored") back into the console mast before installing the console onto the console mast.
2. Fasten the console to the console mast with the four M5 x 12mm screws and washers using a Phillips screwdriver.

### Handlebar

1. Assemble the handlebar onto the mount and insert and tighten the four M8 x 12mm bolts using a 5mm Allen wrench.  
NOTE: The handlebar can be installed upside down. When installed properly, the hand grips align with the bottom of the console.

### Pedals

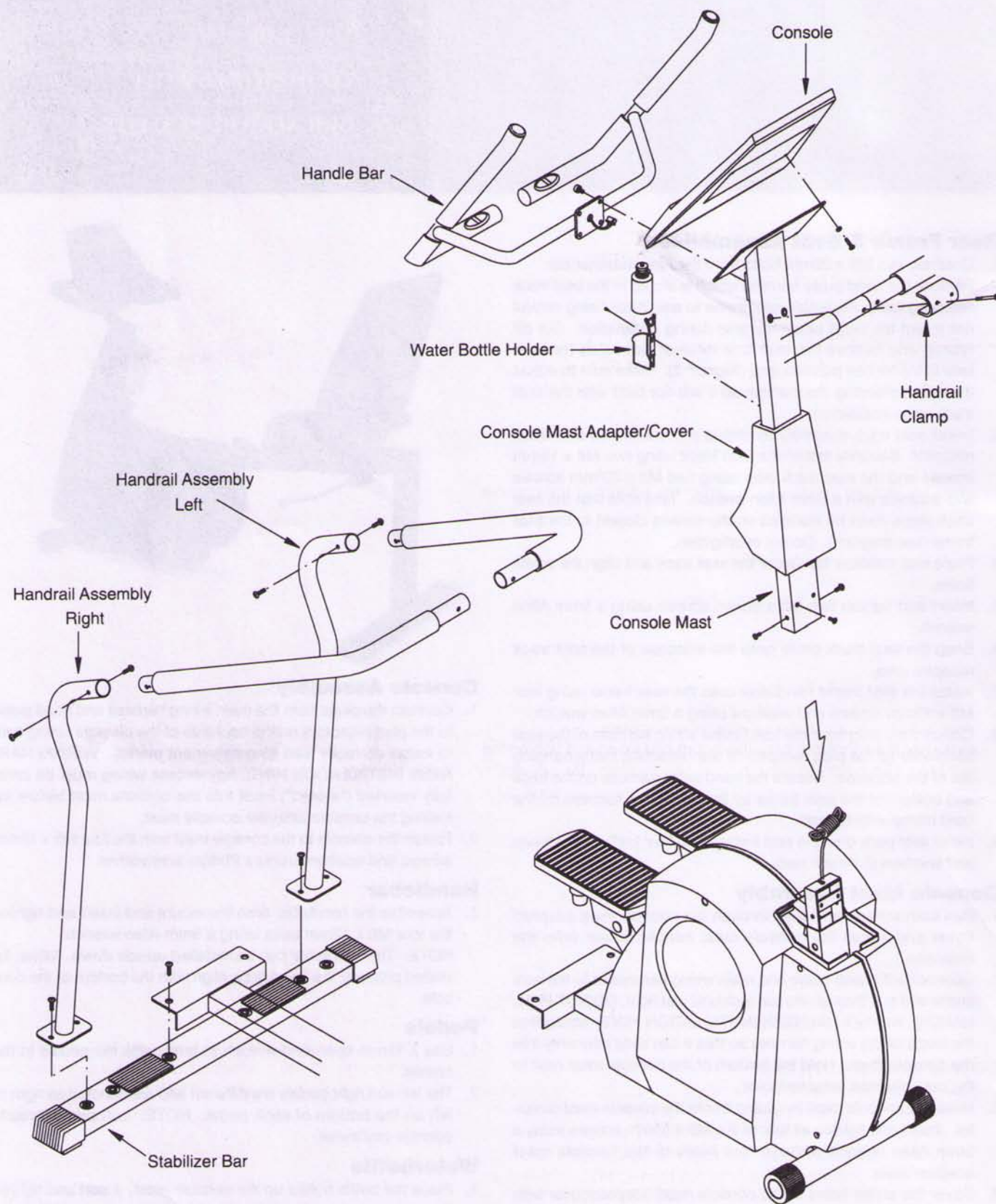
1. Use a 15mm open-end wrench to firmly affix the pedals to the cranks.
2. The left and right pedals are different and are denoted as right or left on the bottom of each pedal. NOTE: Left pedal threads counter-clockwise.

### Waterbottle

1. Place the bottle holder on the console mast. Insert and tighten the two spacers and two M5 x 35mm screws using a screwdriver.
2. Snap the water bottle into bottle holder.



# 1100ES Assembly Drawing







## THE NEXT STEP

The fitness experts at Diamondback believe that

## IN WORKOUT

working out is not just for athletes but for all people.

## TECHNOLOGY.

### Frame Assembly

1. Place rear stabilizer bar under main frame body and align screw holes.
2. Insert and tighten the two M8 x 20mm screws with a 5mm Allen wrench.

### Console Mast Assembly

1. Install console mast adapter/cover onto console mast.
2. Insert the main wire harness into the bottom opening of the console mast-tube. Push the harness up the tube until the connector of the harness appears in the opening at the top of the tube.

#### WIRING HARNESS INSTALLATION HINT:

Straighten the loops of the wiring harness so that it can be slid smoothly into the console mast. Hold the bottom of the console mast next to the console mast receptor and point the top of the console mast downward.

3. Install the console mast by sliding it onto the console mast receptor while pulling the wire harness. This will keep the slack out of the harness so the wires will not get pinched and short out. Insert and tighten the four M8 x 12mm screws with a 5mm Allen wrench.
4. Snap the console mast adapter/cover into top of sidecase.

### Handlebar Assembly

1. Insert the hand pulse harness through the opening of the console mast and out the top of the console mounting plate.
2. Assemble the handlebar onto the mount and insert and tighten the four M8 x 12mm screws using a 5mm Allen wrench. Be sure not to pinch the hand pulse harness during this procedure as this will damage the electronic console.

### Console Assembly

1. Connect both plugs from the main wiring harness and hand pulse wiring harness to the plug receptors on the backside of the console taking care to install correctly (see plug alignment marks). **WIRING HARNESS INSTALLATION HINT:** Any excess wiring must be carefully inserted ("stored") back into the console mast before installing the console onto the console mounting plate.
2. Fasten the console to the console mounting plate with the four M5 x 12mm screws and washers using a Phillips screwdriver.

### Handrail Assembly

1. Assemble the upper and lower sections of the right and left handrails using two M8 x 12mm screws each with a 5mm Phillips Allen wrench.
2. Place the left and right handrail assemblies into position: Assemble the handrail clamp cover and handrails onto the upper portion of the console mast. Insert and finger tighten the two M8 x 55mm Allen screws. Align screws. Align screw holes on bottom of the handrails and top of the stabilizer bar. Insert and tighten two M8 x 20mm screws into each handrail and tighten with a 5mm Allen wrench.



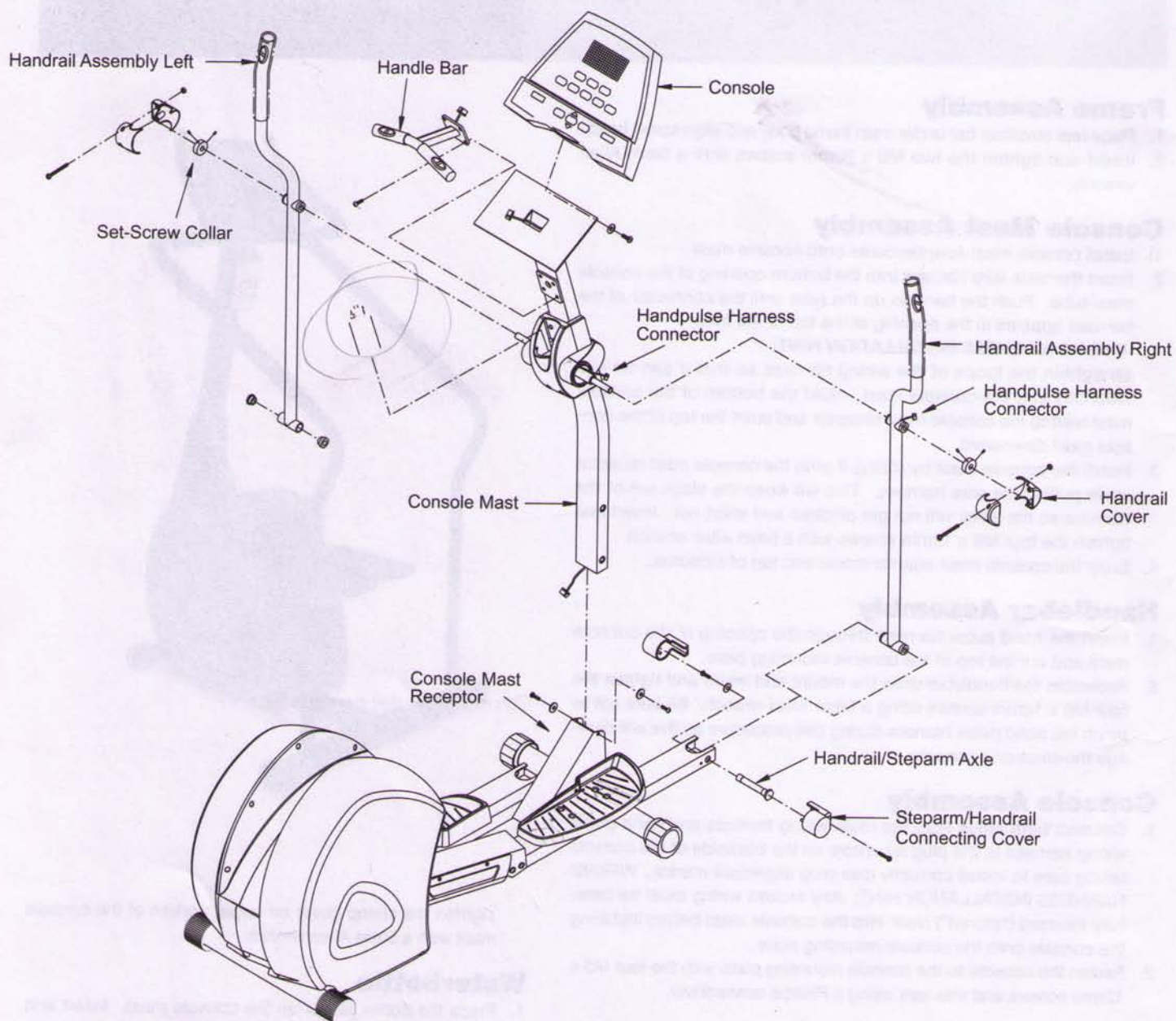
Tighten the clamp cover on upper portion of the console mast with a 5mm Allen wrench.

### Waterbottle

1. Place the bottle holder on the console mast. Insert and tighten the two M5 x 12mm screws using a screwdriver.
2. Snap the water bottle into the bottle holder.



# 1100EL Assembly Drawing





# 1100EL Assembly Instructions



## THE NEXT STEP

The fitness experts at Diamondback believe that

## IN WORKOUT

working out is not just for athletes but for all people.

## TECHNOLOGY.

### Console Mast Assembly

1. Connect main wire harness at bottom of console mast to wire harness at front of frame.
2. Slide console mast into console mast receptor at front end of frame. Be careful not to pinch the wire harness.
3. First, attach console mast to frame at upper hole locations on both sides using two M8 x 20mm screws with their washers and a 5mm Allen wrench. Do not tighten too much yet.
4. Next, attach console mast at lower hole locations on both sides of console mast receptor. NOTE: there are three holes on either side to choose from. The middle hole is for average-sized users and will be suitable for most. The hole closest to the foot pads is for taller users, and the hole farthest from the foot pads is for shorter users. Choose the desirable hole and tighten the screws by using two M8 x 20mm screws with their washers and a 5mm Allen wrench. Then tighten the 2 screws of upper holes of console mast receptor.

### Handrail Assembly

1. Attach right handrail to the console mast at the right handrail axle using the set-screw collar. Be careful not to pinch the hand pulse wire harness. Tighten the set-screw of the right handrail set-screw collar by using the 3mm Allen wrench. Connect the two hand pulse wire harness connectors, the one next to handrail axle and the one from right handrail, together.
2. Next, attach the right handrail to the bottom of the right steparm. Insert the handrail/steparm axle through the holes in the steparm and through the tube at the bottom of the handrail, and attach handrail using the M8 x 20mm screw with washer and a 5mm Allen wrench.
3. Assemble the left handrail the same way.
4. Attach both steparm/handrail connecting covers using M5 x 25mm screws each and a Phillips screwdriver.
5. On either side of the water-bottle cover, attach the handrail covers to each other around the handrails. Be careful to store any excess hand pulse wire harness inside covers. Then use the two M4 x 40mm screws and nuts on each side and tighten them with a Phillips screwdriver.

### Handlebar Assembly

1. Insert the hand pulse harness through the opening of the console mast and out the top of the console mounting plate.
2. Assemble the handlebar onto the mount and insert and tighten the four M8 x 12mm screws using 5mm Allen wrench. Be sure not to pinch the hand pulse harness during this procedure as this will damage the electronic console.
3. Connect the handrail hand pulse wire harness connector and the connector of handlebar hand pulse wire harness together.



### Console Assembly

1. Connect both plugs from the main wiring harness and hand pulse wiring harness to the plug receptors on the backside of the console taking care to install correctly (see plug alignment marks). WIRING HARNESS INSTALLATION HINT: Any excess wiring must be carefully insert (stored) back into the console mast before installing the console onto the console mounting plate.
2. Fasten the console to the console mounting plate with the four M5 x 12mm screws and washers using a Phillips screwdriver.

#### Waterbottle

1. Insert the waterbottle into the waterbottle holder.



## General 1100 Series Tips

**Cadence** There is a strong relationship between cadence (revolutions <RPM>/steps <SPM>) and the efficiency of your workouts. Research indicates that you will be more comfortable and get a lot more work done if you maintain a cadence of at least 60 RPM or SPM. The 1100 series console will give you a continuous readout of your cadence.

### 1100U/R

Proper adjustment of seat position and knowledge of pedaling cadence will allow effective use of your leg muscles without producing undue muscular fatigue. Applying these proper techniques will allow you to ride comfortably and efficiently. The 1100 U & R stationary cycles are biomechanically designed and are fully adjustable to optimize comfort.

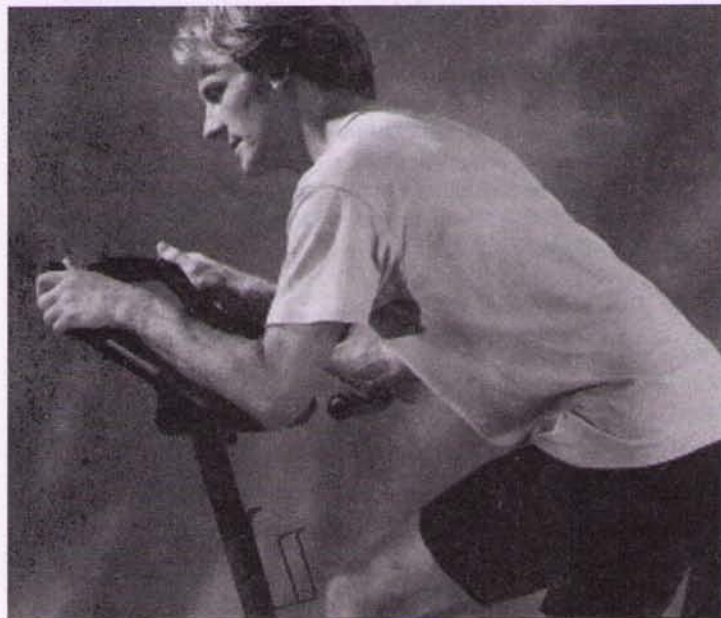
1. **Leg Extension:** The seat should be positioned such that the leg is almost fully extended when the ball of the foot is on the pedal and the pedal is in the position furthest from the body. This will allow for greater use of more leg muscles, thereby maximizing cardiovascular benefit while minimizing fatigue.
2. **Foot Position:** The ball of the foot should be on the pedal, directly over the pedal axle. This position allows you to maximize the action of your calf muscles. Avoid pedaling with the arch of your foot on the pedal. If toe clips and straps are attached to the pedals, use them to stabilize your foot on the pedals but do not use them if they place your foot in an unnatural position.

### 1100ES

The 1100ES is designed for optimum use by most adults. The maximum step height is 16" with an effective user range of 6" to 16". Generally, longer steps will involve a greater use of more leg muscles, thereby maximizing cardiovascular benefit while minimizing fatigue.

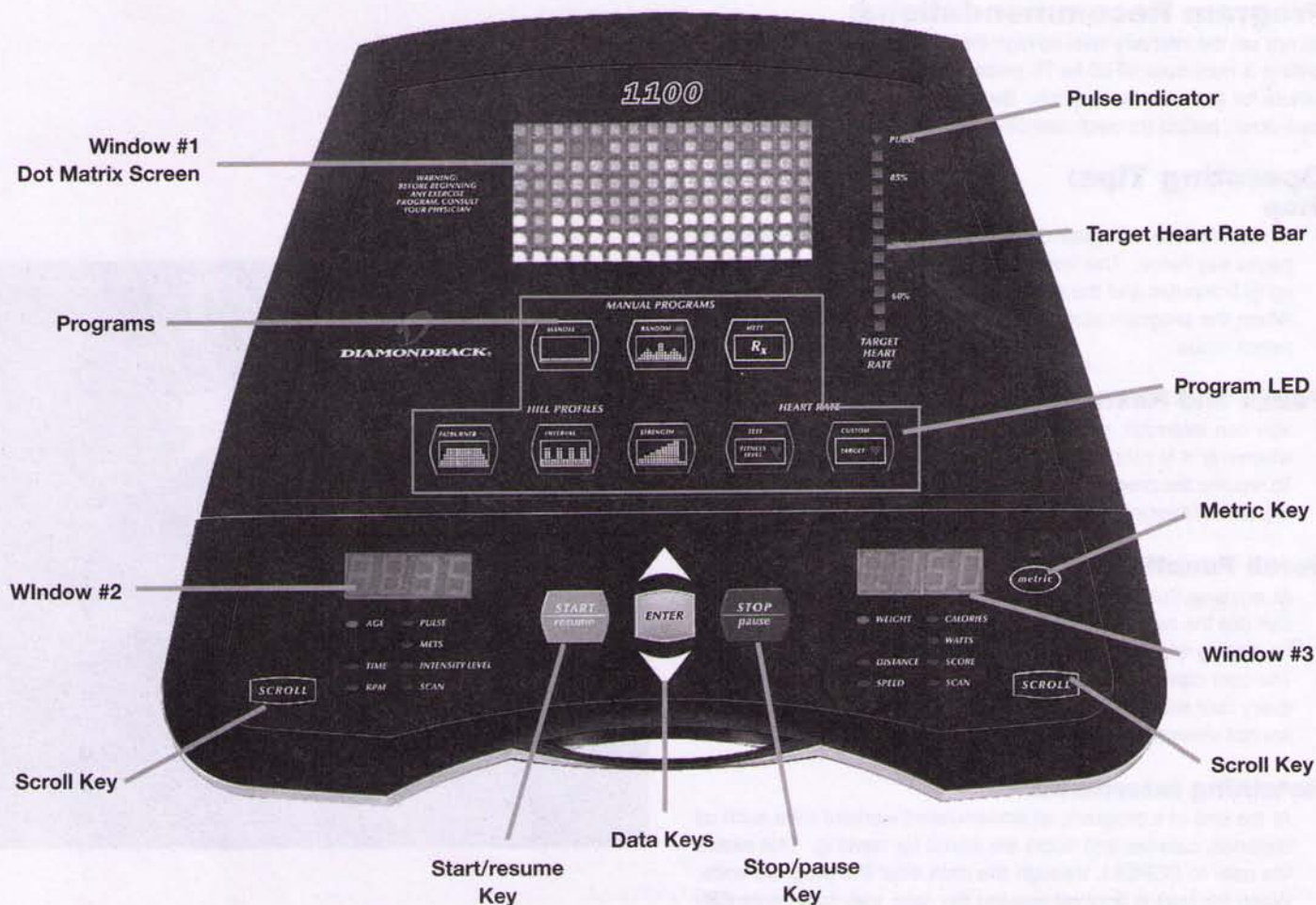
### 1100EL

The 1100EL has the longest stride length (21 inches) in its class. This ensures full leg muscle involvement and a very smooth motion. The 1100EL also incorporates forward and reverse motion to work all major leg muscle groups. These features along with the upper body component of the 1100EL give you a total body workout.





# 1100 Series Console Layout





# Getting Started

The 1100 series is manufactured for home and light commercial use with a maximum utilization time of 4 hours per day / 7 days per week. User weight capacity is 300 pounds / 135 kilograms.

## Program Recommendations:

Do not set the intensity level so high that you have a hard time maintaining a minimum of 60 to 70 pedal revolutions or 50 steps per minute for the exercise session. Be sure to include a warm-up and cool-down period for each exercise session.

## Operating Tips: Stop

- To reset or stop a program during its operation depress the STOP/pause key twice. The first key press will pause the program for up to 5 minutes and the second key press will stop the program. When the program stops, the console returns to the program select mode.

## Pause and Resume

- You can interrupt, or pause, a program for up to five minutes whenever it is running by pressing the STOP/pause key once. To resume the program back to the point where you left off, press the START/resume key.

## Scroll Function

- At anytime during a program, or at the end of a program, you can use the two SCROLL keys to view workout data in the digital display windows (Window #2 and Window #3).
- The user can scroll to the SCAN LED to automatically view data every four seconds. Personal data such as AGE and WEIGHT are not viewed during the scroll function.

## Retaining Information

- At the end of a program, all accumulated workout data such as distance, calories and floors are saved for viewing. This allows the user to SCROLL through the data after the program ends. When the user is finished viewing the data, they may press **ENTER** to exit this mode and enter the program select mode. The data will be carried over to the next program if the user selects another program at this time.

## Default Settings

- Age = 35 years
- Weight = 150 pounds / 68 kilograms
- Time = 30:00 minutes (except FITNESS LEVEL TEST)
- Intensity Level = 1

## English / Metric Settings

- Metric values may be observed by depressing the metric button during the initial programming stage. The metric LED will flash indicating the metric mode may be selected. The metric LED will remain on when the metric mode is selected. If no selection is made, the console will default to English settings.

## Brake / Load Adjustment

- During a program, the user may press the data ▲ or ▼ keys to adjust brake or load levels. (Note: Brake / load adjustments are not allowed in the FITNESS LEVEL TEST program.)





# Exercise Guidelines

Anyone over the age of 35, as well as younger persons who are overweight, should check with his/her physician before beginning any type of exercise program. People who have diabetes or high blood pressure, a family history of heart disease, high cholesterol or have led a sedentary lifestyle should protect themselves with a medical check-up and a stress test, preferably administered during exercise by a healthcare professional.

In 1996, the office of the Surgeon General of the United States released a report on physical activity and health. This report definitively stated that exercise and fitness are beneficial for a person's health and redefined that exercise is a key component of disease prevention and healthier living.

Medical research has shown us that there is an amount of exercise which is enough to condition the cardiorespiratory system and the muscles of the body. This amount of exercise is between 60% and 85% of your maximum heart rate measured during a training session. This range allows enough exercise to achieve fitness, but not an excessive amount to cause injury. Your heart rate is an excellent indicator of the amount of stress placed on the cardiovascular system. Taking full advantage of this information, the 1100 series is designed to include heart rate controlled features.

If exercise intensity is too low or too high, no gains will be made in fitness. If the intensity is too low, the stress levels are ineffective. If the intensity is too high, injury or fatigue may set your exercise program back as you try to recover.

The best way to monitor exercise intensity is to accurately count your pulse during exercise. Your heart rate can easily be determined by counting your pulse at the chest, wrist or at the carotid artery on your neck. It is difficult to count your own pulse during exercise, mainly because you cannot count fast enough to get an accurate number. The 1100 series is equipped with a wireless telemetry system. What it does is automatically count your heart rate while you are exercising. Heart rate is monitored and electronically displayed as a digital readout. Your target heart rate, the intensity needed to improve cardiovascular fitness, depends primarily on your age and not your state of fitness. It is calculated as a percentage of your maximum heart rate, estimated as 220 minus your age. It is most effective to train at your target heart rate which is between 60% and 85% of your maximum heart rate.

## Maximum Heart Rate & Training Zone

To calculate your maximum heart rate and find your training zone use the following formula. An example has been provided below based on a 35-year-old person

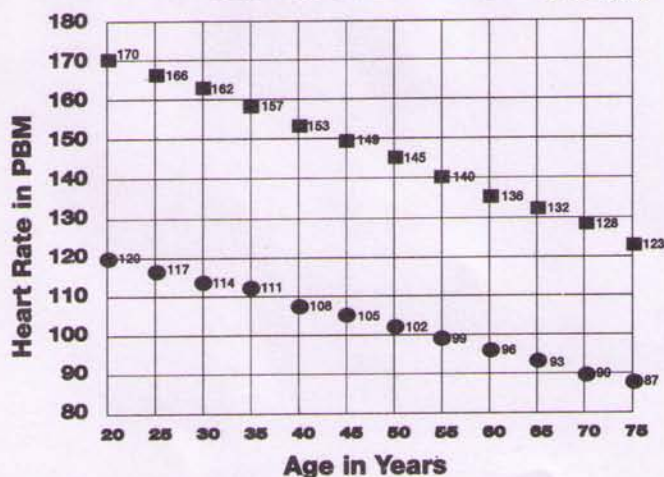
$$220 - \text{Age} = \text{Maximum Heart Rate} \\ (220 - 35 = 185)$$

$$60\% \text{ of Maximum Heart Rate} \\ (60\% \times 185 = 111 \text{ bpm})$$

$$85\% \text{ of Maximum Heart Rate} \\ (85\% \times 185 = 157 \text{ bpm})$$

Training Zone: 111 bpm - 157 bpm

**Heart Rate Guidelines** ■ = 85%  
● = 60%

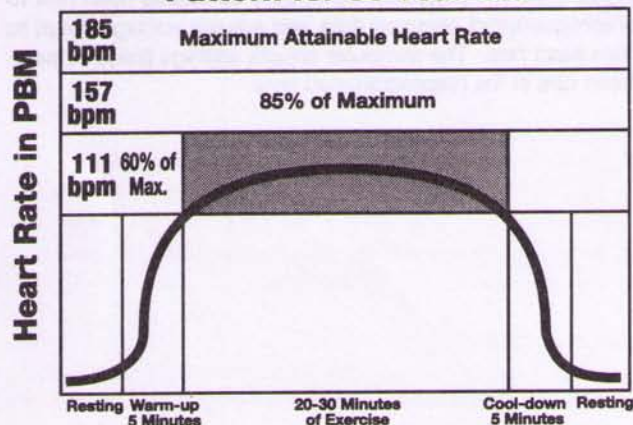


## Quantity & Quality

The American College of Sports Medicine makes the following recommendations for the quantity and quality of training for developing and maintaining cardiorespiratory fitness in healthy adults:

- An activity that uses large muscle groups, maintained continuously, and is rhythmical and aerobic in nature.
- Duration: 20 to 60 minutes of continuous aerobic activity, including a warm-up and cool-down period for each exercise session.
- Frequency: 3 to 5 times per week
- Intensity: 60% to 85% of maximum heart rate
- *In addition to aerobic exercise, it is recommended that you add strength training of moderate intensity twice a week to your program.*

## Typical Target Zone Exercise Pattern for 35 Year Old





# Heart Rate Monitoring

## Pulse Hand Grips (Standard)

The 1100 Series units are heart rate controlled and come standard with stainless steel pulse hand grips. To activate, gently grasp both hand grips to obtain a heart rate reading.

*(Note: If you choose to wear a chest strap for monitoring purposes, please note the console will take the measurement of the chest strap as it is more accurate.)*

## Operating Tips:

If you are not getting a consistent reading while using the hand pulse option, we recommend the following suggestions:

- Make sure that the palms of the hands are touching the contact area of each hand pulse grip.
- Maintain an even pressure on the grips.
- Do not hold the hand pulse grips too tightly.

## Chest Strap (Optional)

The 1100 Series console includes a built-in receiver which will work with most manufacturer's chest straps. To get an accurate reading using these devices, you will need to be within three feet of the console, and a minimum of four feet from others using a heart rate monitoring device.

*(Note: The transmitter may fluctuate erratically if you are too close to other heart rate monitoring equipment.)*

There are three parts to the Heart Rate System on the Diamondback 1100 series equipment.

1. Sensor / Transmitter
2. Chest Band / Strap
3. The Receiver

The receiver of the wireless ECG system is built into the console unit of the Diamondback 1100 series equipment. While using heart rate control modes, the computer monitors the exact measurement of and control over the activity of the heart. Heart rate frequency is displayed while the computer continually compares heart rate to the preprogrammed personal data and adjusts wattage (load) to maintain heart rate. The computer adjusts wattage (load) to maintain heart rate at the preprogrammed level.

## How to Wear Your Sensor / Transmitter

1. Buckle one end of the chest strap onto the transmitter.
2. Adjust the band length so that the fit is snug, but not too tight.
3. Buckle the other end of the chest strap onto the transmitter.
4. Center the transmitter on your chest below the pectoral muscle (breasts).
5. Pull unit away from chest by stretching the belt and moistening the conductive electrode strips located next to the buckles. If you wish to wear the band over a shirt, moisten the shirt under the area of the electrode strip.

*(Note: The transmitter is on automatically when being worn. It is off when it is not connected to your body. However, as moisture may activate the transmitter, thoroughly dry the transmitter to prolong battery life.)*



# Quick Start Manual Mode

## Getting Started

The 1100 Series units are self-generating. Begin pedaling to initialize the unit and enter the programming cycle. When using the Quick Start program, you are accepting the 1100 Series default values. Be sure to include a warm-up and cool-down period as part of your workout.

## Beginning the Program

- Continue to pedal and press the START/resume key to begin program.

## Adjusting Load

- Use data ▲ or ▼ keys to adjust the load level shown in the dot matrix screen.

## Resume or Stop

- After 30:00 minutes the console will beep and the dot matrix will scroll "PRESS ENTER" signifying the end of the program. All

accumulated workout data, such as distance (U/R), calories, and floors (ES) are saved for viewing. This allows the user to scroll through the data after the program ends as you continue to pedal.

- When the user is finished viewing the data, press ENTER to exit this mode and re-enter the program select mode. The data will be carried over to the next program if another program is selected at this time.

## Program Notes

### Stop, Pause, Resume

- Stop - You can reset or stop a program during its operation by pressing the STOP/pause key twice. When the program stops, the console returns to the program select mode.
- Pause & Resume - The program may be interrupted, for up to 5:00 minutes, by depressing the STOP/pause key once. To resume program, begin pedaling and press the START/resume key.

# Manual Program

## Getting Started

The 1100 Series units are self-generating. Begin pedaling to initialize the unit and enter the programming cycle.

## Selecting A Program

- Dot matrix screen will scroll "SELECT PROGRAM." Program LED's will cycle prompting user to select desired profile.
- Press MANUAL.
- Dot matrix screen will display program profile.
- Press ENTER to accept.

## Accepting Default Values or Entering the Programming Procedure

- The user may press START/resume to accept the current default values and begin workout.  
or
- Enter the programming procedure by following the prompts outlined below:

### Entering Age

1. Dot matrix screen scrolls "ENTER AGE".
2. The AGE LED illuminates and Window # 2 flashes a default age of 35. Use data ▲ or ▼ keys to select desired age.
3. Press ENTER to accept.

### Entering Time

1. Dot matrix screen scrolls "ENTER TIME".
2. The TIME LED illuminates and Window # 2 flashes a default time of 30:00 minutes. Use data ▲ or ▼ keys to select desired time.
3. Press ENTER to accept.

### Entering Weight

1. Dot matrix screen scrolls "ENTER WEIGHT".
2. The WEIGHT LED illuminates and Window # 3 flashes a default weight of 150 lbs. / 68 kg. Use data ▲ or ▼ keys to select desired weight.
3. Press ENTER to accept.

## Begin Program or Re-enter the Programming Loop

- Press START/resume to begin program.  
or
- Re-enter the programming procedure by following the prompts displayed on the dot matrix screen.

## Resume or Stop

- After 30:00 minutes the console will beep and the dot matrix will scroll "PRESS ENTER" signifying the end of the program. All accumulated workout data, such as distance (U/R), calories, and floors (ES) are saved for viewing. This allows the user to scroll through the data after the program ends as you continue to pedal.
- When the user is finished viewing the data, press ENTER to exit this mode and re-enter the program select mode. The data will be carried over to the next program if another program is selected at this time.

## Program Notes

### Stop, Pause, Resume

- Stop - You can reset or stop a program during its operation by pressing the STOP/pause key twice. When the program stops, the console returns to the program select mode.
- Pause & Resume - The program may be interrupted, for up to 5:00 minutes, by depressing the STOP/pause key once. To resume program, begin pedaling and press the START/resume key.

## Metric Option

- Metric values may be observed by depressing the metric button during the initial programming stage. The metric LED will flash indicating the metric mode may be selected. The metric LED will remain on when the metric mode is selected. If no selection is made, the console will default to English settings.



# Random

The RANDOM program is designed to allow the user to choose from an unlimited number of computer generated profiles.

## Getting Started

The 1100 Series units are self-generating. Begin pedaling to initialize the unit and enter the programming cycle.

### Selecting A Program

- Dot matrix screen will scroll "SELECT PROGRAM." Program LED's will cycle prompting user to select desired profile.
- Press RANDOM.
- Dot matrix screen will display program profile.
- Continue to press RANDOM until desired program profile is selected.
- Press ENTER to accept.

### Accepting Default Values or Entering the Programming Procedure

- The user may press START/resume to accept the current default values listed and begin workout.  
or
- Enter the programming procedure by following the prompts outlined below:

#### Entering Age

1. Dot matrix screen scrolls "ENTER AGE".
2. The AGE LED illuminates and Window # 2 flashes a default age of 35. Use data ▲ or ▼ keys to select desired age.
3. Press ENTER to accept.

#### Entering Time

1. Dot matrix screen scrolls "ENTER TIME".
2. The TIME LED illuminates and Window # 2 flashes a default time of 30:00 minutes. Use data ▲ or ▼ keys to select desired time.
3. Press ENTER to accept.

#### Entering Intensity Level

1. Dot matrix screen scrolls "ENTER LEVEL".
2. The INTENSITY LEVEL LED illuminates and Window # 3 flashes a default level of 1. Use data ▲ or ▼ keys to select desired level.
3. Press ENTER to accept.

#### Entering Weight

1. Dot matrix screen scrolls "ENTER WEIGHT".
2. The WEIGHT LED illuminates and Window # 3 flashes a default weight of 150 lbs. / 68 kg. Use data ▲ or ▼ keys to select desired weight.
3. Press ENTER to accept.

### Begin Program or Re-enter the Programming Loop

- Press START/resume to begin program.  
or
- Re-enter the programming procedure by following the prompts displayed on the dot matrix screen.

### Resume or Stop

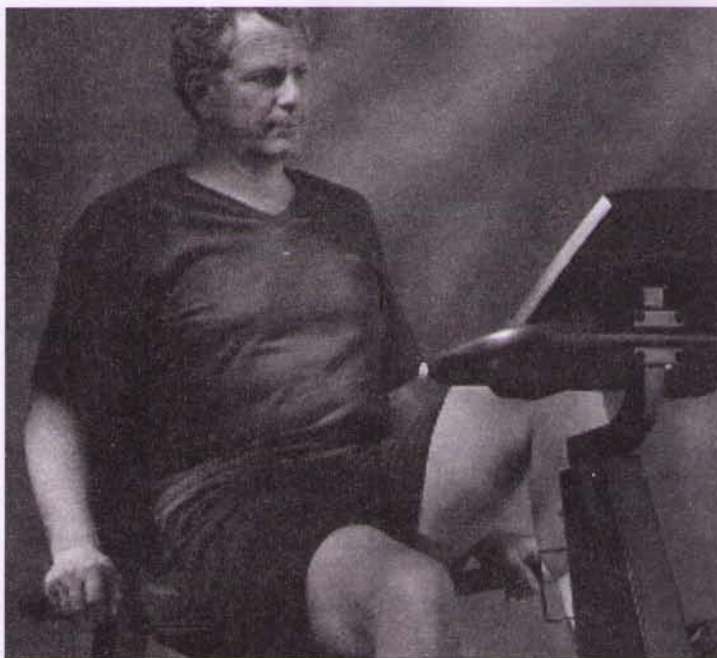
- After 30:00 minutes the console will beep once and the dot matrix will scroll "PRESS ENTER" signifying the end of the program. All accumulated workout data, such as distance (U/R), calories, and floors (ES) are saved for viewing. This allows the user to scroll through the data after the program ends as you continue to pedal.
- When the user is finished viewing the data, press ENTER to exit this mode and re-enter the program select mode. The data will be carried over to the next program if another program is selected at this time.

### Program Notes Stop, Pause, Resume

- Stop - You can reset or stop a program during its operation by pressing the STOP/pause key twice. When the program stops, the console returns to the program select mode.
- Pause & Resume - The program may be interrupted, for up to 5:00 minutes, by depressing the STOP/pause key once. To resume program, begin pedaling and press the START/resume key.

### Metric Option

- Metric values may be observed by depressing the metric button during the initial programming stage. The metric LED will flash indicating the metric mode may be selected. The metric LED will remain on when the metric mode is selected. If no selection is made, the console will default to English settings.





The METS program allows the 1100 series to be electronically controlled to deliver a specific work rate independent of pedal rate. As the pedal rate falls, the load on the wheel is increased proportionally. As the pedal rate intensifies, the load on the wheel is decreased proportionally. There are 16 levels of adjustments in the METs program (1-16 in 0.5 increments).

A comparison is provided below to give you a better understanding of the relationship between calories per hour, watts and METs.

(Note: These comparisons are based on a person weighing 150 pounds.)

Calories/Hr.	Watts	MET's
145	34	3.0
291	68	5.1
436	102	7.1
581	136	9.1
726	170	11.2
872	203	13.2
1,017	237	15.2
1,162	271	17.3

## Getting Started

The 1100 Series units are self-generating. Begin pedaling to initialize the unit and enter the programming cycle.

## Selecting A Program

- Dot matrix screen will scroll "SELECT PROGRAM." Program LED's will cycle prompting user to select desired profile.
- Press METS.
- Dot matrix screen will display program profile.
- Press ENTER to accept.

## Accepting Default Values or Entering the Programming Procedure

- The user may press START/resume to accept the current default values listed and begin workout.
- or
- Enter the programming procedure by following the prompts outlined below:

## Entering Age

1. Dot matrix screen scrolls "ENTER AGE".
2. The AGE LED illuminates and Window # 2 flashes a default age of 35. Use data ▲ or ▼ keys to select desired age.
3. Press ENTER to accept.

## Entering Time

1. Dot matrix screen scrolls "ENTER TIME".
2. The TIME LED illuminates and Window #2 flashes a default time of 30:00 minutes. Use data ▲ or ▼ keys to select desired time.
3. Press ENTER to accept.

## Entering MET Level

1. Dot matrix screen scrolls "ENTER MET".
2. The METS LED illuminates and Window #2 flashes a default level of 1.0. Use data ▲ or ▼ keys to select desired MET level.
3. Press ENTER to accept.

## Entering Weight

1. Dot matrix screen scrolls "ENTER WEIGHT".
2. The WEIGHT LED illuminates and Window #3 flashes a default weight of 150 lbs. / 68 kg. Use data ▲ or ▼ keys to select desired weight.
3. Press ENTER to accept.

## Begin Program or Re-enter the Programming Loop

- Press START/resume to begin program.
- or
- Re-enter the programming procedure by following the prompts displayed on the dot matrix screen.

## Resume or Stop

- After 30:00 minutes the console will beep once and the dot matrix will scroll "PRESS ENTER" signifying the end of the program. All accumulated workout data, such as distance (U/R), calories, and floors (ES) are saved for viewing. This allows the user to scroll through the data after the program ends as you continue to pedal.
- When the user is finished viewing the data, press ENTER to exit this mode and re-enter the program select mode. The data will be carried over to the next program if another program is selected at this time.

## Program Notes

### Stop, Pause, Resume

- Stop - You can reset or stop a program during its operation by pressing the STOP/pause key twice. When the program stops, the console returns to the program select mode.
- Pause & Resume - The program may be interrupted, for up to 5:00 minutes, by depressing the STOP/pause key once. To resume program, begin pedaling and press the START/resume key.

## Metric Option

- Metric values may be observed by depressing the metric button during the initial programming stage. The metric LED will flash indicating the metric mode may be selected. The metric LED will remain on when the metric mode is selected. If no selection is made, the console will default to English settings.



The FATBURNER program provides a consistent level of work during your exercise session. Exercising at this consistent level is more effective in the fat burning process.

## Getting Started

The 1100 Series units are self-generating. Begin pedaling to initialize the unit and enter the programming cycle.

## Selecting A Program

- Dot matrix screen will scroll "SELECT PROGRAM." Program LED's will cycle prompting user to select desired profile.
- Press FATBURNER.
- Dot matrix screen will display program profile.
- Press ENTER to accept.

## Accepting Default Values or Entering the Programming Procedure

- The user may press START/resume to accept the current default values listed and begin workout.  
or
- Enter the programming procedure by following the prompts outlined below:

## Entering Age

1. Dot matrix screen scrolls "ENTER AGE".
2. The AGE LED illuminates and Window #2 flashes a default age of 35. Use data ▲ or ▼ keys to select desired age.
4. Press ENTER to accept.

## Entering Time

1. Dot matrix screen scrolls "ENTER TIME".
2. The TIME LED illuminates and Window #2 flashes a default time of 30:00 minutes. Use data ▲ or ▼ keys to select desired time.
3. Press ENTER to accept.

## Entering Level

1. Dot matrix screen scrolls "ENTER LEVEL".
2. The INTENSITY LEVEL LED illuminates and Window #3 flashes a default level of 1. Use data ▲ or ▼ keys to select desired level.
3. Press ENTER to accept.

## Entering Weight

1. Dot matrix screen scrolls "ENTER WEIGHT".
2. The WEIGHT LED illuminates and Window # 3 flashes a default weight of 150 lbs. / 68 kg. Use data ▲ or ▼ keys to select desired weight.
4. Press ENTER to accept.

## Begin Program or Re-enter the Programming Loop

- Press START/resume to begin program.  
or
- Re-enter the programming procedure by following the prompts displayed on the dot matrix screen.

## Resume or Stop

- After 30:00 minutes the console will beep and the dot matrix will scroll "PRESS ENTER" signifying the end of the program. All

accumulated workout data, such as distance (U/R), calories, and floors (ES) are saved for viewing. This allows the user to scroll through the data after the program ends as you continue to pedal.

- When the user is finished viewing the data, press ENTER to exit this mode and re-enter the program select mode. The data will be carried over to the next program if another program is selected at this time.

## Program Notes

### Stop, Pause, Resume

- Stop - You can reset or stop a program during its operation by pressing the STOP/pause key twice. When the program stops, the console returns to the program select mode.
- Pause & Resume - The program may be interrupted, for up to 5:00 minutes, by depressing the STOP/pause key once. To resume program, begin pedaling and press the START/resume key.

## Metric Option

- Metric values may be observed by depressing the metric button during the initial programming stage. The metric LED will flash indicating the metric mode may be selected. The metric LED will remain on when the metric mode is selected. If no selection is made, the console will default to English settings.



# Interval

The INTERVAL program helps to build the strength of your cardiovascular system. By alternating the workload from high to low, your heart gets an effective workout.

## Getting Started

The 1100 Series units are self-generating. Begin pedaling to initialize the unit and enter the programming cycle.

## Selecting A Program

- Dot matrix screen will scroll "SELECT PROGRAM." Program LED's will cycle prompting user to select desired profile.
- Press INTERVAL.
- Dot matrix screen will display program profile.
- Press ENTER to accept.

## Accepting Default Values or Entering the Programming Procedure

- The user may press START/resume to accept the current default values listed and begin workout.  
or
- Enter the programming procedure by following the prompts outlined below:

### Entering Age

1. Dot matrix screen scrolls "ENTER AGE".
2. The AGE LED illuminates and Window #2 flashes a default age of 35. Use data ▲ or ▼ keys to select desired age.
3. Press ENTER to accept.

### Entering Time

1. Dot matrix screen scrolls "ENTER TIME".
2. The TIME LED illuminates and Window #2 flashes a default time of 30:00 minutes. Use data ▲ or ▼ keys to select desired time.
3. Press ENTER to accept.

### Entering Intensity Level

1. Dot matrix screen scrolls "ENTER LEVEL".
2. The INTENSITY LEVEL LED illuminates and Window #3 flashes a default level of 1. Use data ▲ or ▼ keys to select desired level.
3. Press ENTER to accept.

### Entering Weight

1. Dot matrix screen scrolls "ENTER WEIGHT".
2. The WEIGHT LED illuminates and Window # 3 flashes a default weight of 150 lbs. / 68 kg. Use data ▲ or ▼ keys to select desired weight.
3. Press ENTER to accept.

## Begin Program or Re-enter the Programming Loop

- Press START/resume to begin program.  
or
- Re-enter the programming procedure by following the prompts displayed on the dot matrix screen.

## Resume or Stop

- After 30:00 minutes the console will beep and the dot matrix will scroll "PRESS ENTER" signifying the end of the program. All accumulated workout data, such as distance (U/R), calories, and floors (ES) are saved for viewing. This allows the user to scroll through the data after the program ends as you continue to pedal.
- When the user is finished viewing the data, press ENTER to exit this mode and re-enter the program select mode. The data will be carried over to the next program if another program is selected at this time.

## Program Notes

### Stop, Pause, Resume

- Stop - You can reset or stop a program during its operation by pressing the STOP/pause key twice. When the program stops, the console returns to the program select mode.
- Pause & Resume - The program may be interrupted, for up to 5:00 minutes, by depressing the STOP/pause key once. To resume program, begin pedaling and press the START/resume key.

## Metric Option

- Metric values may be observed by depressing the metric button during the initial programming stage. The metric LED will flash indicating the metric mode may be selected. The metric LED will remain on when the metric mode is selected. If no selection is made, the console will default to English settings.



# Strength

The STRENGTH program gradually increases the workload over time. This will strengthen not only your heart, but also the major muscle groups which are doing the work.

## Getting Started

The 1100 Series units are self-generating. Begin pedaling to initialize the unit and enter the programming cycle.

## Selecting A Program

- Dot matrix screen will scroll "SELECT PROGRAM." Program LED's will cycle prompting user to select desired profile.
- Press STRENGTH.
- Dot matrix screen will display program profile.
- Press ENTER to accept.

## Accepting Default Values or Entering the Programming Procedure

- The user may press START/resume to accept the current default values listed and begin workout.
- or
- Enter the programming procedure by following the prompts outlined below:

## Entering Age

1. Dot matrix screen scrolls "ENTER AGE".
2. The AGE LED illuminates and Window #2 flashes a default age of 35. Use data ▲ or ▼ keys to select desired age.
3. Press ENTER to accept.

## Entering Time

1. Dot matrix screen scrolls "ENTER TIME".
2. The TIME LED illuminates and Window #2 flashes a default time of 30:00 minutes. Use data ▲ or ▼ keys to select desired time.
3. Press ENTER to accept.

## Entering Intensity Level

1. Dot matrix screen scrolls "ENTER LEVEL".
2. The INTENSITY LEVEL LED illuminates and Window #3 flashes a default level of 1. Use data ▲ or ▼ keys to select desired level.
3. Press ENTER to accept.

## Entering Weight

1. Dot matrix screen scrolls "ENTER WEIGHT".
2. The WEIGHT LED illuminates and Window #3 flashes a default weight of 150 lbs. / 68 kg. Use data ▲ or ▼ keys to select desired weight.
3. Press ENTER to accept.

## Begin Program or Re-enter the Programming Loop

- Press START/resume to begin program.
- or
- Re-enter the programming procedure by following the prompts displayed on the dot matrix screen.

## Resume or Stop

- After 30:00 minutes the console will beep and the dot matrix will scroll "PRESS ENTER" signifying the end of the program. All accumulated workout data, such as distance (U/R), calories, and floors (ES) are saved for viewing. This allows the user to scroll through the data after the program ends as you continue to pedal.
- When the user is finished viewing the data, press ENTER to exit this mode and re-enter the program select mode. The data will be carried over to the next program if another program is selected at this time.

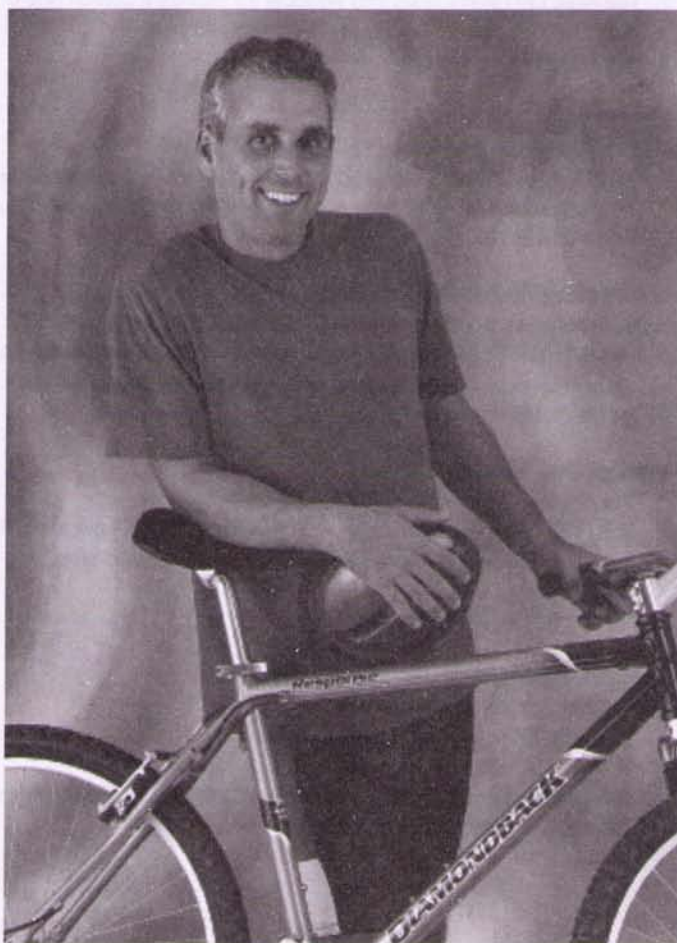
## Program Notes

### Stop, Pause, Resume

- Stop - You can reset or stop a program during its operation by pressing the STOP/pause key twice. When the program stops, the console returns to the program select mode.
- Pause & Resume - Program may be interrupted, for up to 5:00 minutes, by depressing the STOP/pause key once. To resume program, begin pedaling and press the START/resume key.

## Metric Option

- Metric values may be observed by depressing the metric button during the initial programming stage. The metric LED will flash indicating the metric mode may be selected. The metric LED will remain on when the metric mode is selected. If no selection is made, the console will default to English settings.





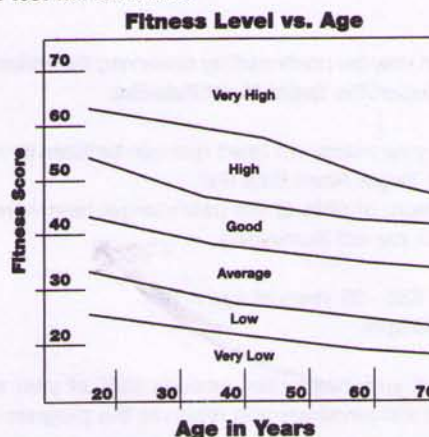
# Fitness Level Test

The **FITNESS LEVEL TEST**, based on YMCA Protocol Standards, is provided as a tool to evaluate your fitness level. During exercise, the muscles convert oxygen to the fuel needed for the muscles to do the required work. The harder you work, the more oxygen the muscles require. This oxygen, or fuel, is delivered to the muscles by the cardiovascular, or blood, system. The harder you exercise the faster your heart beats in order to maintain the fuel supply to the muscles. As your fitness level improves, your muscles become more efficient and therefore do not require as much fuel. This means your heart does not have to beat as fast as before to do the same amount of work.

The **FITNESS LEVEL TEST** uses this basic knowledge to determine how fit you are. During the test, the user is introduced to pre-determined workloads. The reaction of your heart is then monitored to these workloads. At the end of the test you will be provided with a score based on the results. This score will give you a starting point to use in tracking your fitness progress. Use this test occasionally to monitor the improvement in your level of fitness. Be sure to include a warm-up and cool-down period in your exercise session.

## A HEART RATE MONITORING DEVICE MUST BE USED FOR THIS TEST.

- Pulse detection may be confirmed by observing the Pulse Indicator light (♥ PULSE) at the top of the Target Heart Rate Bar.
- IMPORTANT: If your heart rate exceeds 95% of your maximum target, the test will terminate.



## Fitness Level Test - Getting Started

The 1100 Series units are self-generating. Begin pedaling to initialize the unit and enter the programming cycle.

### Selecting A Program

- Dot matrix screen will scroll "SELECT PROGRAM." Program LED's will cycle prompting user to select desired profile.
- Press TEST / FITNESS LEVEL.
- Dot matrix screen will display program profile.
- Press ENTER to accept.

### Accepting Default Values or Entering the Programming Procedure

- The user may press START/resume to accept the current default values listed and begin workout.
- or
- Enter the programming procedure by following the prompts outlined:

### Entering Age

1. Dot matrix screen scrolls "ENTER AGE".
2. The AGE LED illuminates and Window #2 flashes a default age of 35. Use data ▲ or ▼ keys to select desired age.
3. Press ENTER to accept.

### Entering Weight

1. Dot matrix screen scrolls "ENTER WEIGHT".
2. The WEIGHT LED illuminates and Window #3 flashes a default weight of 150 lbs. / 68 kg. Use data ▲ or ▼ keys to select desired weight.
3. Press ENTER to accept.
4. Press START to begin.

The TIME LED illuminates and Window #2 displays a default time of 12:00 minutes which will immediately begin counting down.

If the test has been completed successfully, the SCORE LED illuminates and Window #3 displays the user's score. A score of 0 means the test has failed to get the proper heart rate readings during the test period. If the test fails be sure that you are wearing a chest strap and are pedaling between 60 and 70 RPM/SPM.

## Tracking Your Progress

Test #1	Test #2	Test #3	Test #4	Test #5
Score: _____	Score: _____	Score: _____	Score: _____	Score: _____
Date: _____	Date: _____	Date: _____	Date: _____	Date: _____

### Program Notes

- BPM (beats per minute) may be checked by scrolling to the PULSE option in Window #2.
- Percentage of your maximum heart rate can be seen by observing the illuminated Target Heart Rate Bar.

(Note: A minimum of 50% of the user's target heart rate must be detected before bar will illuminate.)

Example: 220 - 35 years of age = 185  
185 x 50% = 93 bpm

### Stop

- You can reset or stop a program during its operation by pressing the STOP/pause key twice. When the program stops, the console returns to the program select mode.

### Metric Option

- Metric values may be observed by depressing the metric button during the initial programming stage. The metric LED will flash indicating the metric mode may be selected. The metric LED will remain on when the metric mode is selected. If no selection is made, the console will default to English settings.



# Custom Target

The CUSTOM program is designed to keep the user training at their chosen heart rate level.

A HEART RATE MONITORING DEVICE MUST BE USED FOR THIS PROGRAM.

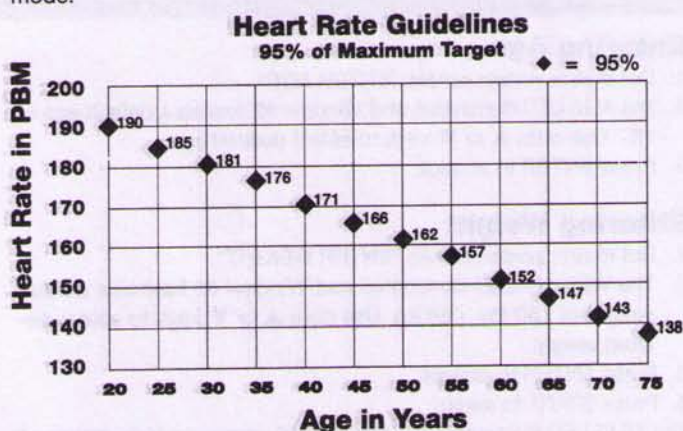
Pulse detection may be confirmed by observing the Pulse Indicator light ♥ at the top of the Target Heart Rate Bar.

Percentage of your maximum heart rate can be seen by observing the illuminated Target Heart Rate Bar.

(Note: A minimum of 50% of the user's target heart rate must be detected before bar will illuminate.)

Example: 220 - 35 years of age = 185  
185 x 50% = 93 bpm

**IMPORTANT:** If your heart rate exceeds 95% of your maximum target, the test will terminate and return to the program selection mode.



## Entering Time

1. Dot matrix screen scrolls "ENTER TIME".
2. The TIME LED illuminates and Window #2 flashes a default time of 30:00 minutes. Use data ▲ or ▼ keys to select desired time.
3. Press ENTER to accept.

## Entering Pulse

1. Dot matrix screen scrolls "ENTER PULSE".
2. The PULSE LED illuminates and Window #2 flashes a default level of 100. Use data ▲ or ▼ keys to select desired pulse.
3. Press ENTER to accept.

## Entering Weight

1. Dot matrix screen scrolls "ENTER WEIGHT".
2. The WEIGHT LED illuminates and Window # 3 flashes a default weight of 150 lbs. / 68 kg. Use data ▲ or ▼ keys to select desired weight.
3. Press ENTER to accept.

## Begin Program or Re-enter the Programming Loop

- Press START/resume to begin program.  
or
- Re-enter the programming procedure by following the prompts displayed on the dot matrix screen.

## Resume or Stop

- After 30:00 minutes the console will beep and the dot matrix will scroll "PRESS ENTER" signifying the end of the program. All accumulated workout data, such as distance (U/R), calories, and floors (ES) are saved for viewing. This allows the user to scroll through the data after the program ends as you continue to pedal.
- When the user is finished viewing the data, press ENTER to exit this mode and re-enter the program select mode. The data will be carried over to the next program if another program is selected at this time.

## Program Notes

### Stop, Pause, Resume

- Stop - You can reset or stop a program during its operation by pressing the STOP/pause key twice. When the program stops, the console returns to the program select mode.
- Pause & Resume - Program may be interrupted, for up to 5:00 minutes, by depressing the STOP/pause key once. To resume program, begin pedaling and press the START/resume key.

## Metric Option

- Metric values may be observed by depressing the metric button during the initial programming stage. The metric LED will flash indicating the metric mode may be selected. The metric LED will remain on when the metric mode is selected. If no selection is made, the console will default to English settings.

## Getting Started

The 1100 Series units are self-generating. Begin pedaling to initialize the unit and enter the programming cycle.

## Selecting A Program

- Dot matrix screen will scroll "SELECT PROGRAM." Program LED's will cycle prompting user to select desired profile.
- Press CUSTOM / TARGET ♥.
- Dot matrix screen will display program profile.
- Press ENTER to accept.

## Accepting Default Values or Entering the Programming Procedure

- The user may press START/resume to accept the current default values listed and begin workout.  
or
- Enter the programming procedure by following the prompts outlined below:

## Entering Age

1. Dot matrix screen scrolls "ENTER AGE".
2. The AGE LED illuminates and Window #2 flashes a default age of 35. Use data ▲ or ▼ keys to select desired age.
3. Press ENTER to accept.



# Domestic Warranty Information (Applies to all product sold and placed within the continental US only)

Effective: August 1999

Diamondback warrants its 1100 series to be free from defects in material and workmanship under normal use in the home and light commercial markets. Diamondback's obligation under this warranty is limited to repair or replacement of any defective part without charge for the part to the original purchaser within the following parameters:

## Who is Covered

The warranty is extended to the individual or legal entity whose name appears on the warranty registration card filed with Diamondback and may not be transferred to any other individual or legal entity.

## Warranty Registration

WARRANTY COMMITMENTS ARE VALID ONLY WITH A COMPLETED WARRANTY CARD THAT IS RETURNED WITHIN 15 DAYS FROM THE DATE OF PURCHASE AND INCLUDES THE PRODUCT SERIAL NUMBER.

Proof of purchase from Diamondback's authorized dealer or distributor will be required if the warranty card is not registered prior to any consideration of warranty claim.

(Note: If home use purchasers do not forward a completed warranty card to Diamondback within 15 days from the date of purchase, Diamondback will only honor the light commercial warranty outlined

## What is Covered

### Home

### Light Commercial

(4 Hrs./Day Max. Usage)

Frame:

Lifetime limited warranty, covers defects in welds, materials and workmanship

Lifetime limited warranty, covers defects in welds, materials and workmanship.

Parts &

Electronics:

2 Years

1 Year

Normal Wear

90 day limited on pedal  
Items: straps, foam grips, etc.

90 day limited on pedal  
straps, foam grips, etc.

Labor:

1 Year

1 Year

## Items Not Covered

The warranty does not apply to any failure of the product, or any parts of the product, due to alterations, modifications, misuse, abuse, accident, improper maintenance, or if the serial number on the product has been removed, altered or defaced. Adequate packaging must be used for returned goods to prevent freight damage.

## Parts & Service

Contact the authorized Diamondback dealer where unit was originally purchased. If that retailer is unavailable, contact Diamondback Warranty at (800) 776-7642.

Diamondback is not responsible for arranging warranty service and/or honoring extended warranties provided by dealers.

## Additional Rights

This warranty gives the purchaser specific legal rights, and the purchaser may also have other rights depending on state law.

## Maintenance

### CAUTION - FOR SAFE OPERATION

Always inspect hardware prior to any exercise session. Look for loose hardware, loose pedals, loose cranks, and frayed wires. Repair or replace any damaged or worn parts, tighten all loose hardware.

As part of Diamondback's normal installation and set-up process, all pedal cranks must be tightened after 8 to 10 hours of initial riding to ensure parts are properly seated to axle. This is standard initial "break in" service which must be performed after the first 8 to 10 hours of use. Untightened pedal cranks may become loose, causing damage which may void warranty.

After training, always wipe down your 1100 series unit. Perspiration that continuously settles on frame, pads or casing may eventually cause rust or damage to the unit. Damage resulting from lack of proper maintenance will not be covered under warranty. To clean pads, use a mild soap and warm water. Dry with clean towel.

If noises develop or malfunctions occur, contact your authorized Diamondback fitness dealer.



# Specifications

User Capacity:	300 lbs. / 135 kg.
Brake System:	Computer Controlled Electromagnetic Resistance
Wiring:	22 AWG Copper, PVC Jacketed
Bearings:	Sealed Ball Bearings
Console:	High Impact ABS Plastic, Circuit Board: FR4 Fiberglass, LED 3-Color Dot Matrix, Polar® Compatible, Upper Heart Rate Limit Auto Shut-off, Built-in Reading Rack & Walkman®/Accessories Holder
Console Feedback:	Time, Distance, Speed, RPM, Heart Rate (Pulse), METs, Intensity Level, Calories, Watts, Fitness Test Score, Pause Mode with 5 Minute Program Saver, 128 Segment Dot Matrix Profile Display, Target Heart Rate Graphic Display, Two Numeric Window Displays and English/Metric Readouts. (1100ES - Total Floors, Floors Per Minute, Steps Per Minute).
Programming Options:	Manual Mode with Quick Start Option, Random Program with Unlimited Training Profiles and METs Program with 32 Different Constant Power Levels, Three (3) Pre-programmed Hill Profiles (Fatburner, Interval, Strength) with 16 Intensity Levels, Two (2) Heart Rate Programs including a Heart Rate Based Fitness Test and Custom Target Heart Rate Training Program. (Fitness Test based on YMCA Protocol Standards).
Heart Rate Readout:	Customized Hand Held Pulse Sensor Standard, Built-in Heart Rate Receiver Compatible with Optional Heart Rate Chest Belt
Operating Specifications:	Pedal RPM Range: 25 to 130 RPM Step Rate: 25 to 130 SPM Resistance Range: 25 to 1,000 watts
Frame:	Welded 14 Gauge Steel Tubing and 9 Gauge Steel Support Plates
Paint:	Epoxy/Polyester Hybrid Powder Coating
Side Cases:	High Impact, ABS Plastic
Hardware:	SAE 1020 with BED Finish
Drive Belts:	Fiber reinforced Wingprene Poly-V
Upholstery:	Poly Urethane Emerald Surface Foam
Foam Grip:	PVC Nitrile Rubber
Designated Use:	Home or Light Commercial Use
Max. Use Time:	4 hours per day, 7 days per week

## Space & Weight Requirements

Model	Shipping Specifications	Assembled Specifications
1100U Upright	106 lbs. / 38"Lx16"Wx29"H (48 kg. / 952mmLx401mmWx726mmH)	95 lbs. / 40"Lx24.5"Wx53.5"H (43 kg. / 1016mmLx622mmWx1359mmH)
1100R Recumbent	136 lbs. / 45"Lx17.5"Wx29"H (62 kg. / 1127mmLx438mmWx726mmH)	123 lbs. / 59"Lx24.5"Wx50"H (56 kg. / 1499mmLx622mmWx1270mmH)
1100ES Stepper	158 lbs. / 43.5"Lx18"Wx28"H (72 kg. / 1089mmLx451mmWx701mmH)	147 lbs. / 36"Lx38"Wx65"H (67 kg. / 914mmLx965mmWx1651mmH)
1100EL Elliptical	168 lbs. / 63"Lx27"Wx31"H (76.3kgs. / 1600mmLx690mmWx780mmH)	152lbs. / 26"Wx58"H (69kgs. / 1500mmL x 650mmWx1480mmH)



## NOTES

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



## This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slightly textured appearance and some very faint, light blue smudges or marks, particularly towards the right side. The edges of the paper are slightly irregular, suggesting it might be a scan of a physical document.



**IMPORTANT!**

**IMPORTANT!**

**IMPORTANT!**

**IMPORTANT!**

**Warranty Card must be completed and returned to Diamondback within 15 days of purchase. Failure to comply may void manufacturer's warranty.**



Your Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip \_\_\_\_\_

Daytime Phone No.: \_\_\_\_\_ Evening Phone No.: \_\_\_\_\_

Dealer Store Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip \_\_\_\_\_

Model: \_\_\_\_\_ Serial No.: \_\_\_\_\_

**Environment Unit Placed:**

☐ Home ☐ Light Commercial

Purchase Date: \_\_\_\_\_

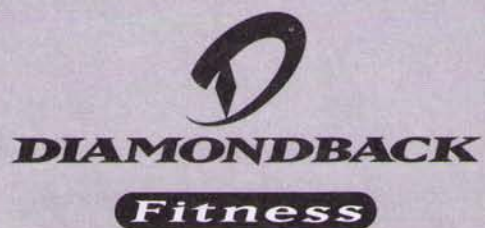
*Mail Completed form to:*

**Diamondback Fitness - Warranty Card**

300 Camarillo Ranch Road

Camarillo, California 93012





*Sales & Distribution*  
300 Camarillo Ranch Road  
Camarillo, CA 93012  
T 805-484-4450 • F 805-388-5890

*Corporate Headquarters*  
22710 - 72nd Avenue South, Box 97072  
Kent, WA 98032  
T 253-395-1100 • F 253-872-0257

Part Number:  
**22-18-952**

10/25/00