

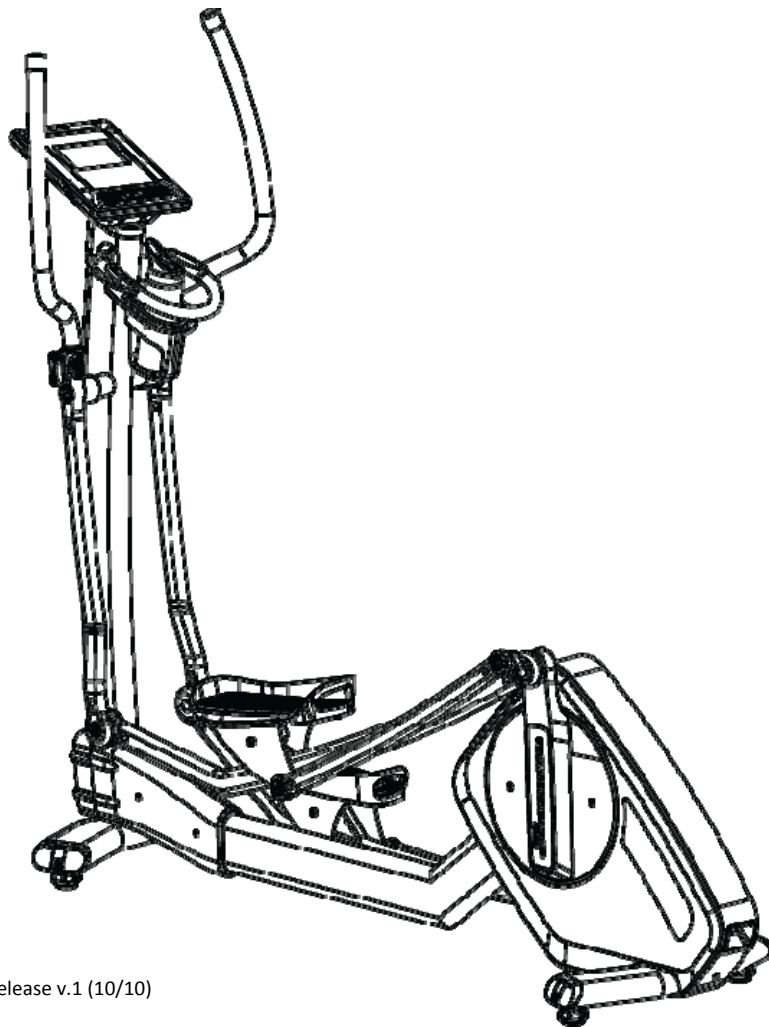
**DIAMONDBACK**  
*Fitness*



**910Er**

**REAR DRIVE ELLIPTICAL TRAINER  
OWNER'S MANUAL**





## **910Er** Rear-Drive Elliptical Trainer Diamondback Fitness



## INTRODUCTION

Congratulations on the purchase of your new Diamondback Fitness elliptical trainer. You have made a great choice and are about to enjoy one of the most effective and technically-advanced methods of low-impact cardio-vascular exercise available today.

Founded in 1991 as an off-shoot of the legendary bicycle company, Diamondback Fitness was in many ways a complimentary addition to the Diamondback brand. One might even say this extension grew as a natural evolution...an evolution from classic outdoor bicycle usage, toward indoor-based cycling and cross training. It turns out that many fitness enthusiasts were searching for ways to maintain conditioning during times of inclement weather or simply looking for new and different cross-training options.

This trend still continues today, twenty years later, as the strong Diamondback brand resonates with both the boomers who grew up with the bicycles, as well as the younger generations riding them today.

Diamondback Fitness continues to build upon this legendary brand identity by offering the cardio enthusiast a full line of upright exercise bikes, recumbent cycles, and elliptical trainers, each offering superior value and quality with intuitive and visually-appealing design. Let's just say, we are already planning our next twenty years.

Thank you for choosing Diamondback Fitness.

### **Diamondback Fitness**

**6004 South 190<sup>th</sup> Street, Suite 101 • Kent WA 98032 • Ph. 1.800.776.7642 • Fax: 1.800.776.2073**

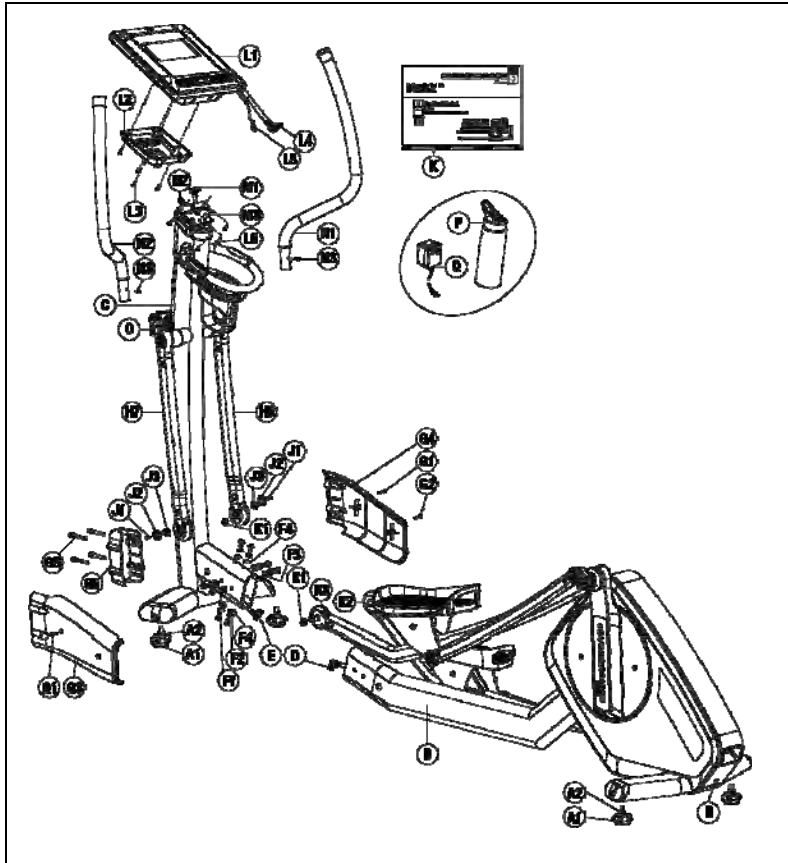
For more information or questions regarding your equipment, please visit our website at [DiamondbackFitness.com](http://DiamondbackFitness.com).



## TABLE OF CONTENTS

INTRODUCTION	5
TABLE OF CONTENTS	7
CARTON CONTENTS	8
ASSEMBLY INSTRUCTIONS	9
FINAL INSTALLATION	13
CUSTOM USER ADJUSTMENTS	13
WORKOUT GUIDELINES	14
WORKOUT QUALITY AND QUANTITY	17
910 CONSOLE OVERVIEW	18
CONSOLE DISPLAYS	18
CONSOLE KEYS	21
CONSOLE FEATURES	23
CONSOLE OPERATION	24
CONSOLE SETUP	26
QUICK START PROGRAM	27
HEART RATE PROGRAMS	28
FIT TEST PROGRAM	32
CLASSIC PROGRAMS	34
USER SETUP MODE	36
MAINTENANCE	38
WARRANTY INFORMATION	39
PURCHASER'S REFERENCE INFORMATION	43

**CARTON CONTENTS**

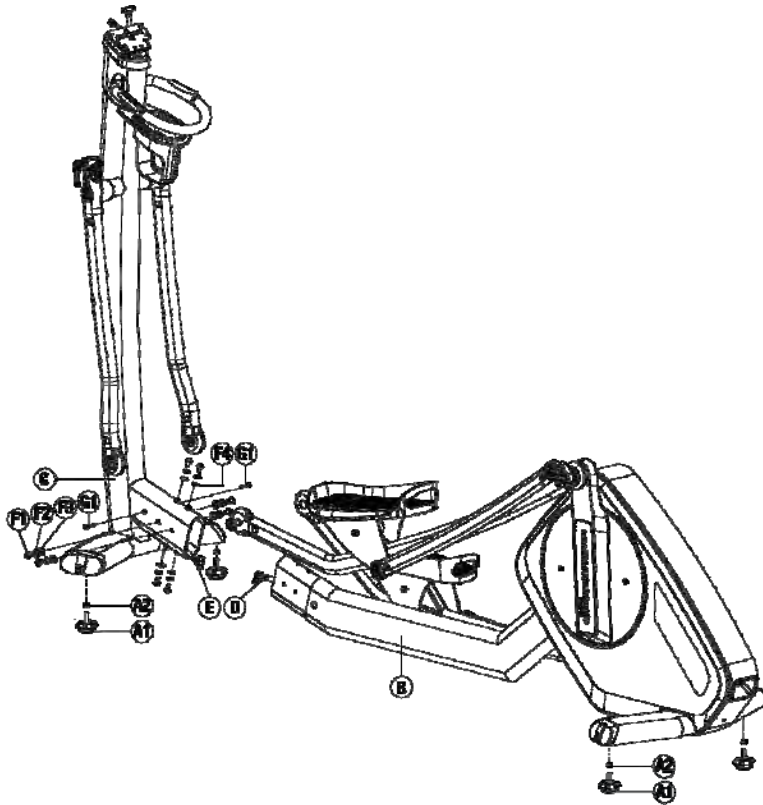


**Parts List**

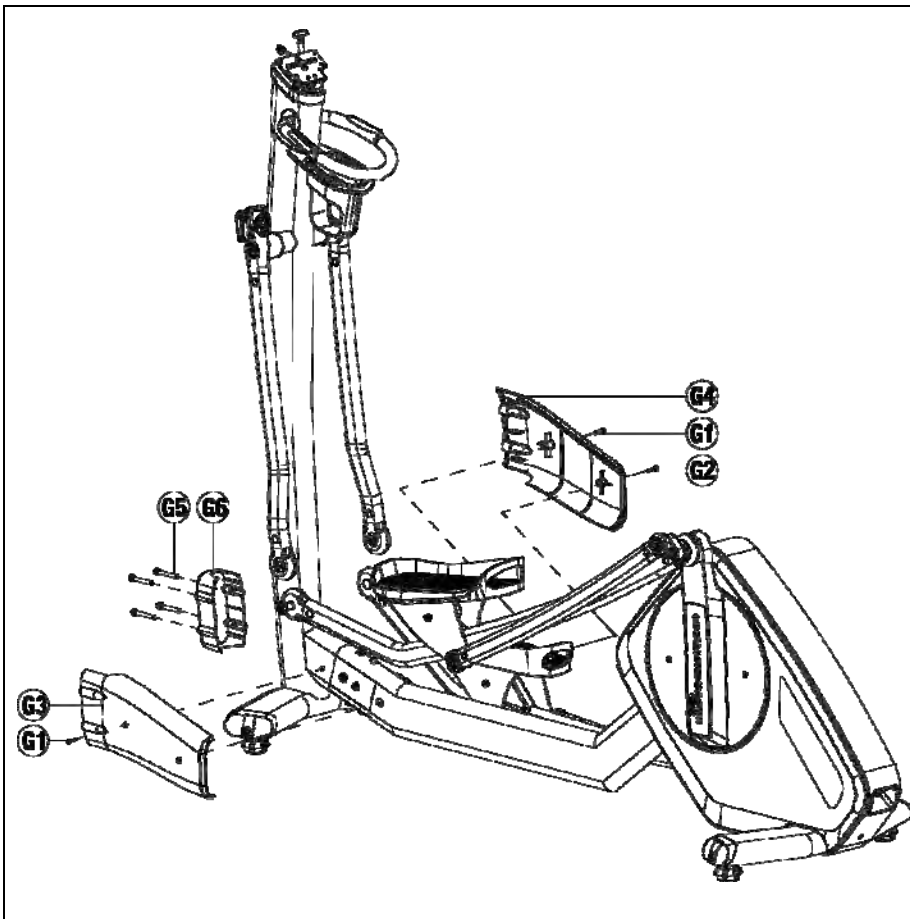
Item	Description	Quantity
A1	Stabilizer Foot	4
A2	Stabilizer Foot Lock Nut	4
B	Rear Frame Assembly	1
C	Console Mast Assembly	1
D	Main Wire Harness Connector – Frame	1
E	Main Wire Harness Connector – Lower Mast	1
F1	Allen Bolt - M8 x 1.25 x 16 mm (6 mm socket)	8
F2	Lock Washer – 8.0 x 12.9 x . 2.4T mm	8
F3	Flat Washer – 8.0 x 19.0 x 2.0 mm	4
F4	Curved Washer – 8.0 x 19.0 x 2.0 mm	4
G1	Allen Bolt – M5 x 0.8 x 20 mm	2
G2	Allen Bolt – M5 x 0.8 x 20 mm	1
G3	Lower Console Mast Cover – Left	1
G4	Lower Console Mast Cover – Right	1
G5	Allen Bolt – M8 x 1.25 x 55 mm	4
G6	Lower Console Mast Cover – Front	1
H1	Lower Handlebar Assembly – Left	1
H2	Lower Handlebar Assembly – Right	1
J1	Allen Bolt – M5 x 0.8 x 8 mm	2
J2	Pivot Cap – Large	1
J3	Hex Nut – 9/16 x 8T (20 mm flats)	2
K	Assembly Hardware Kit	1
K1	Spacer – 20 x 4.5T mm	2
K2	Step Arm – Right	1
K3	Step Arm – Left	1
L1	910 Series Console	1
L2	Console Hinge Cover	1
L3	Phillips Screw	4
L4	Main Wire Harness Connector – Console	1
L5	Heart Rate Wire Harness Connector – Console	1
L6	Phillips Screw	4
M1	Main Wire Harness Connector – Upper Mast	1
M2	Heart Rate Wire Harness Connector – Upper Mast	1
N1	Upper Handlebar – Right	1
N2	Upper Handlebar – Left	1
N3	Allen Bolt – M5 x 0.8 x 10 mm	2
O	Handlebar Width Adjustment Lever	2
P	Water Bottle	1
Q	120V 9V 1A Power Adaptor	1
R	Power Input Jack	1



## ASSEMBLY INSTRUCTIONS



1. Unpack the 910Er from the carton. Please recycle.
2. Verify the carton contains all parts from the list.
3. Install the four (4) stabilizer feet assemblies (**A1** & **A2**) into the under-side of the front and rear stabilizers. Thread all the way in.
4. Remove the eight (8) Allen screws (**F1**), eight (8) lock washers (**F2**), four (4) flat washers (**F3**) and four (4) curved washers (**F4**) from rear frame assembly **B** and set aside.
5. Remove the two (2) Allen bolts **G1** from the left and right sides of the console mast assembly (**C**) and set aside.
6. Stand the rear frame assembly (**B**) right-side up and lay the console mast assembly (**C**) nearby. Join connectors **D** and **E** firmly to ensure a good connection.
7. Carefully stand console mast assembly **C** upright and join with the rear frame assembly (**B**). Ensure rear assembly (**B**) is fully inserted into the console mast receiver (**C**) by confirming the bolt holes are aligned.
8. Install, by hand, the four (4) Allen screws, lock washer & flat washer assemblies (**F1**, **F2** & **F3**) into the sides of console mast assembly **B**. Thread the four (4) Allen screws, lock washer & curved washer assemblies (**F1**, **F2** & **F4**) into the top and bottom of the frame. Once all bolts are partially installed, tighten each firmly with the enclosed Allen wrench.



9. Parts **G2**, **G3**, **G4**, **G5** and **G6** will arrive pre-assembled. Remove the four (4) Allen bolts (**G5**) from the lower console mast front cover (**G6**) and set aside.
10. Remove Allen bolt **G2** from the right side of the sidecase (**G4**) and set aside.
11. Remove the two Allen screws (**G1**) from the sides of the frame and set aside.
12. Gather the left and right lower console mast covers (**G3** & **G4**) and bring together as a clamshell over the console mast/main frame union. Align covers with the mounting holes in the main frame and loosely thread the two (2) Allen screws (**G1**) into place.
13. Loosely install Allen screw **G2** through the plastic cover **G4** and into cover **G3**.
14. Install the lower console mast front cover (**G6**) by threading the four (4) Allen screws (**G5**) through the face and into parts **G3** and **G4**. Do not over-tighten.
15. Tighten Allen screws **G1** and **G2**. Do not over-tighten and be aware of improper alignment as the plastic parts come together.

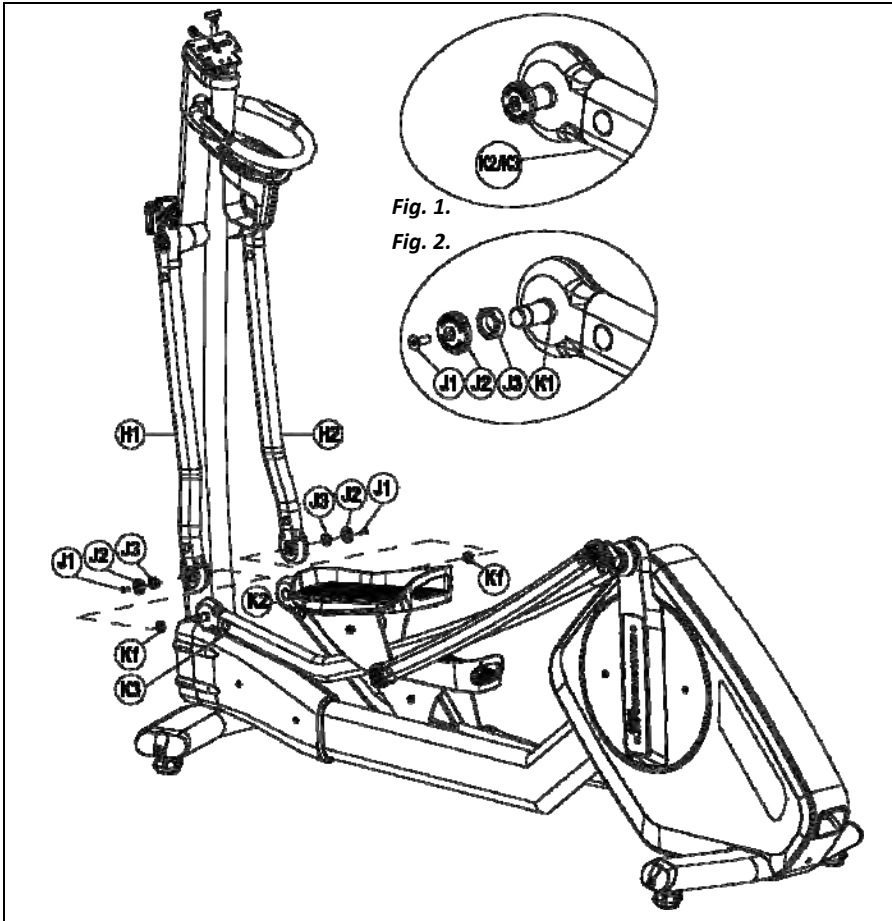
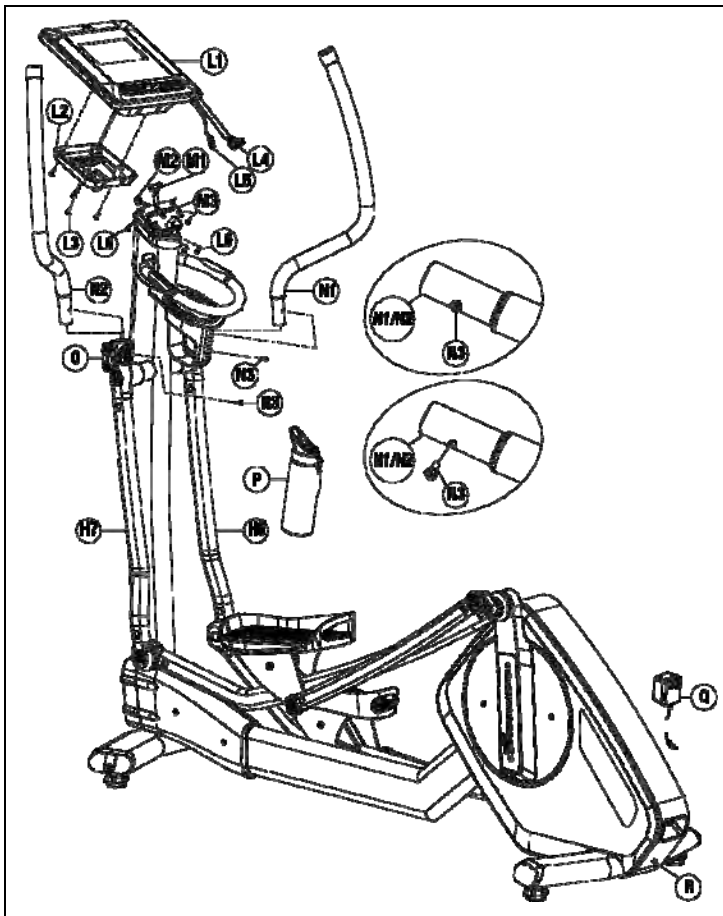


Fig. 1.

Fig. 2.

16. The forward pivots of the step arms (**K2 & K2**) will arrive with the fixing hardware pre-installed as depicted in **Fig. 1**.
17. Remove the hardware assembly (parts **J1, J2** and **J3**) from the step arms and set aside.
18. Spacer **K1** should remain in place on the pivot axles.
19. Bring the pivots of the left step arm (**K3**) and handlebar (**H1**) together and slide the handlebar pivot over the step arm pivot axle. Ensure the parts are aligned. Press together until the arm pivot nearly touches the steparm pivot.
20. Thread fixing nut (**J3**) onto the pivot axle by hand. Ensure that the nut is installed correctly and not cross-threaded. Tighten with the provided wrench.
21. Insert Allen screw **J1** through pivot cap **J2** and into the end of the steparm pivot axle. Tighten with the included Allen key.
22. Repeat this process for the right side assembly.



23. Remove the four (4) Philips screws (**L3**) and the console hinge cover (**L2**) from the back of the console (**L1**) and set aside.
24. Remove the four (4) Philips console mounting screws (**L6**) from backside of the console (**L1**) and set aside.
25. Route wire connectors **M1** & **M2** through backside of the console hinge cover (**L2**).
26. While supporting the console (**L1**), carefully join connectors **L4** with **M1**. Ensure the connection is complete.
27. Join connector **L5** with **M2**. Apply firm pressure to ensure positive engagement.
28. Tilt the console hinge plate (**M3**) toward the rear of the unit.
29. Reinstall the four (4) Philips machine screws (**L6**) through the underside of the console hinge plate (**M3**) and into the backside of the console (**L1**). Only the upper and lower sets of holes should be used. Do not install the screws in the center holes.
30. With the console tilted upright, align the hinge cover (**L2**) with the appropriate holes in the backside of the console. Reinstall the four (4) Philips wood screws (**L3**).
31. Place the water bottle (**P**) in the holder.
32. Plug the power adapter (**Q**) into a 120 volt outlet. Plug the other end into the input jack (**R**).
33. Check the stability of the unit. If required, adjust the leveling feet to eliminate any rocking of the unit while in use. Lock the feet in place by tightening the nut upward (counter-clockwise) against the frame.

## FINAL INSTALLATION

Upon completion of the assembly steps, it may be necessary to move the unit. The 910Er is equipped with an integrated transport wheel which is recessed into the front of the frame. To move the unit, lift the rear frame, using the hand-hold. Lift the rear end upward until the wheels touch the floor, and carefully roll the unit into position.

Plug the unit into a power outlet.

Ensure the unit is stable by adjusting the leveling feet.



## CUSTOM USER ADJUSTMENTS - Diamondback Natural Alignment (DNA)

With the 910Er now assembled and set into place, the user-specific settings should be adjusted. Diamondback Fitness recognizes the fact that each body is unique. Several built in features allow the user to fine tune the fit of the 910Er for a more ergonomic and comfortable workout.

We call these features *Diamondback Natural Alignment* or *DNA*.

### Variable-Width Footbeds

The variable-width footbeds are designed to accommodate the width of an individual's pelvis. A wider pelvis typically indicates the body requires a wider stance. The 910Er allows the user to adjust the width of the footbeds from 1.7" (4.3 cm) wide to 3.2" (8.1 cm) to more closely match their natural alignment and mechanics.

To adjust the footbeds, remove the six (6) clear plastic footbed caps and set aside. Loosen the six (6) Allen bolts until the footbeds moves freely. There is no reason to completely remove the bolts. Align the footbeds to the desired position as indicated by the markings on the footbed liner.

Re-fix the footbeds by tightening the six (6) Allen bolts. Reinstall the six (6) footbed caps.

Position Marking	Footbed Width
-	1.7" (4.3 cm)
N	2.45" (6.2 cm)
+	3.2" (8.1 cm)



## Tilting Console

To ensure users of every stature can maintain a clear and highly visible view of the console, the 910Er features a tilting console. Hinged at the bottom, adjust the display by gripping the top and tilting the entire console fore and aft until the desired viewing angle is achieved.

## Adjustable Width Handlebars

The adjustable-width handlebars are designed to accommodate an individual’s body mechanics. Rather than attempting to adjust the user’s natural motion to one that is fixed and inflexible, the 910Er offers a customized fit. The three handlebar positions allow the width to be adjusted with a range of 9.5” (24.1 cm) and an adjustable reach with 7.5” (19.0 cm) of fore-aft adjustment.

	Handlebar Reach	Handlebar Width
-	- 3.0” (- 7.6 cm)	18.75” (47.6 cm)
N	0.0” (0.0 cm)	25.75” (65.4 cm)
+	+ 5.5” (+ 13.9 cm)	28.25” (71.8 cm)



To adjust the bars, open the red quick-release levers on the left and right pivots. Select the desired position and reset the quick release lever. The pressure required to lock the lever should be sufficient to remove any movement of the handlebar. Adjustment of the lever is similar to a nut and bolt. Hold the lever in the open position and rotate the nut on the opposite end clockwise to tighten and counter-clockwise to loosen. While holding the handlebar in the desired position, close the lever. The amount of pressure required to properly lock the lever should leave an impression in the palm of the user’s hand.

## WORKOUT GUIDELINES

### Good Health is an Exercise in Common Sense

In the study titled, “The Surgeon General’s Call-To-Action To Prevent and Decrease Overweight and Obesity”, the surgeon general indicates that 61% of American adults are either overweight or obese. The study indicates that being overweight increases the risk of health problems, such as heart disease, certain types of cancer, as well as Type-2 diabetes among other afflictions.

### Heart Rate is an Important Key to Your Exercise

The Surgeon General also released a report on physical activity and health. This report dictates that exercise and fitness are beneficial for a person’s health and reiterated the need for exercise as a key component for disease prevention and healthier living.

The best way to determine exercise intensity is to monitor your pulse rate. Your heart rate can easily be determined by counting the number of heart beats per minute at the chest, wrist or the carotid artery on your neck. It is difficult however to count your own pulse while exercising

as it is not possible to count fast enough to accurately track the number of beats per minute. This Diamondback Fitness unit is equipped with a set of touch heart rate sensors.

**Body Mass Index; BMI = (weight (lb) / height<sup>2</sup> (in)) x 703**

		Weight in Pounds													
		120	130	140	150	160	170	180	190	200	210	220	230	240	250
Height in Feet and Inches	4'6	29	31	34	36	39	41	43	46	48	51	53	56	58	60
	4'8	27	29	31	34	36	38	40	43	45	47	49	52	54	56
	4'10	25	27	29	31	34	36	38	40	42	44	46	48	50	52
	5'0	23	25	27	29	31	33	35	37	39	41	43	45	47	49
	5'2	22	24	26	27	29	31	33	35	37	38	40	42	44	46
	5'4	21	22	24	26	28	29	31	33	34	36	38	40	41	43
	5'6	19	21	23	24	26	27	29	31	32	34	36	37	39	40
	5'8	18	20	21	23	24	26	27	29	30	32	34	35	37	38
	5'10	17	19	20	22	23	24	26	27	29	30	32	33	35	36
	6'0	16	18	19	20	22	23	24	26	27	28	30	31	33	34
	6'2	15	17	18	19	21	22	23	24	26	27	28	30	31	32
	6'4	15	16	17	18	20	21	22	23	24	26	27	28	29	30
	6'6	14	15	16	17	19	20	21	22	23	24	25	27	28	29
6'8	13	14	15	17	18	19	20	21	22	23	24	25	26	28	

Note: Chart applies to adults aged 20 years and older

- Healthy Weight
- Overweight
- Obese

## Using the Touch Heart Rate Sensors

While the unit is powered-on and a workout program is operating, gently grasp both touch heart rate sensors on the handlebar. The computer will detect your pulse rate and register the value as a two or three digit number in the PULSE window on the LCD display.

**NOTE:** *If an inconsistent heart rate is displayed while using the hand pulse sensors:*

- *Ensure the palms of both hands are touching the contact areas of the touch heart rate sensors.*
- *Maintain constant and even pressure on the grips. Do not clutch the sensors tightly.*
- *Try to keep both hands still while gripping the touch heart rate sensor.*
- *Make sure the contacts are clean.*
- *Try moistening the palms of your hands.*



**Touch heart rate sensors.**

## Using the Wireless Heart Rate Receiver

In general, a wireless heart rate chest strap is the most accurate and convenient method of detecting and monitoring a heart rate signal and is a considerable upgrade from the touch type heart rate sensors. Occasionally, certain factors can negatively affect the accurate transmission of the heart rate signal. WiFi networks, cordless telephones and large electrical appliances may degrade or corrupt the signal so that the rate appears erratic or impossibly high. The only remedy for such a symptom is to isolate the unit from potential disturbances. Additionally, a person's body chemistry or lack of perspiration can prevent the chest strap from providing a strong or accurate heart rate signal

A wireless telemetry heart rate receiving system is one feature found on this unit. In order for the console to detect and display your heart rate *wirelessly*, four (4) conditions must be present:

- A compatible heart rate chest strap transmitter (not included) must be functioning and worn. For proper function of the chest strap, please refer to the manufacturer's instructions. Non-coded transmitters such as the Polar model T31 and T34 are examples of wireless chest straps known to be compatible with this unit.
- The unit must be powered on.
- A workout program must be running.
- The user is within three (3) feet of the console.

## Calculated Maximum Heart Rate & Target Training Zone

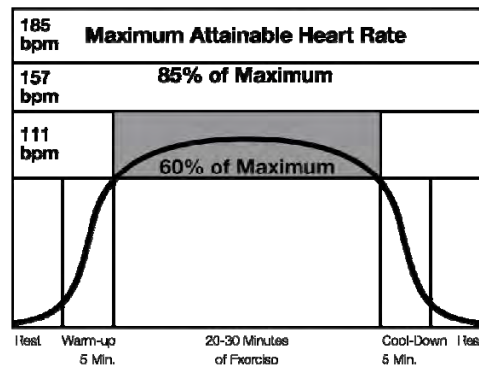
Your target heart rate depends primarily upon your age. It is important to work within a safe and productive zone, for if the exercise intensity is too low or too high, only modest gains will be made in strength and cardio-vascular fitness. A workout at a very low intensity will not offer maximum benefits. Conversely, if the workout intensity is too high, injury or fatigue may slow the progression of your exercise goals as the body attempts to recover.

**Note:** *It is most effective to train at a heart rate between 60% and 85% of your maximum heart rate. Maximum heart rate is calculated as a percentage of your maximum heart rate (estimated as 220 BPM minus your age).*

To calculate your maximum heart rate and find the appropriate target training zone, use the following formulas. The following estimation would be relevant for a 35 year-old user:

- $220 - 35 = 185$  BPM (220 - Age = Calculated Maximum Heart Rate in Beats-per-minute/BPM)
- $0.60 \times 185 = 111$  BPM (60% of 185 BPM [Calculated Maximum Heart Rate] = 111 BPM)
- $0.85 \times 185 = 157$  BPM (85% of 185 BPM [Calculated Maximum Heart Rate] = 157 BPM)

## Typical Target Zone Exercise Patterns for 35 year-old





Based on these calculations, the recommended heart rate training zone for this user would be between 111 BPM and 157 BPM. The graph above displays the recommended heart rate training zone for users twenty years of age to seventy-five years of age.

## WORKOUT QUALITY AND QUANTITY

It is recommended that you accumulate at least thirty (30) minutes of physical activity most days of the week. The American College of Sports Medicine makes the following recommendations for the quantity and quality of training for developing and maintaining cardio-respiratory 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 session.
- Frequency: 3 to 5 times per week.
- Intensity: 60% to 85% of maximum heart rate.

In addition to aerobic exercise, strength training of moderate intensity twice per week is recommended. Women especially may benefit from weight-bearing exercises. Select activities you enjoy and can fit into daily life. Having Diamondback Fitness equipment at home offers you the opportunity to work out without going to the gym.

### Get a Smart Start on Exercising

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

- Stretching and massaging major muscles (such as your quadriceps) following a workout session will aid in the dissipation of lactic acid and speed your body's recovery.
- The first few minutes of your workout should be devoted to warming up the muscles before a vigorous workout. Concentrate on raising your heart rate slowly.
- After an aerobic workout of roughly 20-30 minutes, spend 10 minutes gradually reducing your heart rate by moving slower or with less resistance.

**NOTE:** *Start slow, with intensity low until you build up endurance and strength. Always consult your physician before beginning any exercise program.*

## 910 CONSOLE OVERVIEW

### Console Layout



## CONSOLE DISPLAYS

### Level / Resistance



The resistance level currently being applied is displayed in the Level field. Alternatively, the load or resistance level is also displayed in the display matrix as a flashing column. There are thirty-two (32) resistance levels to choose from.

### Time Displays (Total Time & Segment Time)



Located in the center of the upper display are the *Total Time* and *Segment Time* clocks. The Total Time field will count up the total elapsed time for the current program, then switch to display the total time remaining. The display will switch between these two values every five seconds unless this featured is disabled by the user. The user can toggle the switching feature on and off by pressing the RIGHT ARROW key. The Segment Time display time will alternate the display between the *elapsed* and *remaining* time for the current segment of the program. The segment time is equal to 1/20<sup>th</sup> of the total program time and is graphically displayed in the Display Matrix field. The user can toggle the switching feature on and off by pressing the RIGHT ARROW key.

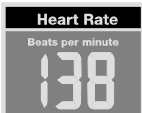


### Watts



*Watts* are a measurement of energy generation and are frequently adopted within the fitness industry to track the amount of work generated at any given time during a workout. Watts are calculated with input from the user's current *Speed* and *Level/Resistance*.

### Heart Rate / Beats-per-minute (BPM)



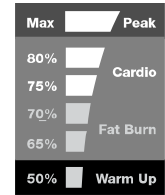
When the user's heart rate signal is detected via the heart rate sensors on the fixed handlebar or a wireless transmitter (such as a chest strap) the heart and DB symbols will flash and the user's current heart rate will be displayed.

If the user's heart rate signal is not detected, *No Signal* will light and the heart rate display will post "--". When operating a *heart rate control* program, *Target Heart Rate Achieved* will be lit if the user's current heart rate is within the defined range. The "DB/Heart" logo will flash to indicate that a heart rate signal is being received.

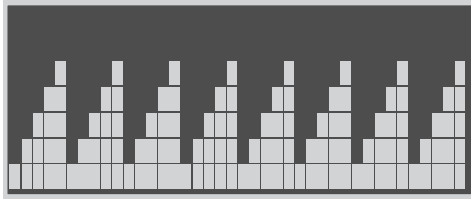


## Heart Rate Bar Graph

The Heart Rate Bar Graph provides the user with meaningful heart rate feedback in an easy-to-read format. When a heart rate signal is detected, the bars of the graph will light to indicate at which percentage of the user's maximum heart rate and training zone (Warm Up, Fat Burn, Cardio, or Peak) the user is operating within. The Heart Rate Bar Graph will not light if the user is operating in *guest* mode or no heart rates signal is detected. If the QuickStart program is running, the default age value will be used to calculate the estimated maximum heart rate.



## Matrix Display



When the console operates in the program run mode, the matrix will graphically display the resistance level and profile for the selected program. A higher stack represents a higher resistance level, while a flashing column indicates the user's progress in the program at any given time. Each vertical column represents a time interval determined by the total length of the program. Each column will equal  $1/40^{\text{th}}$  of the total program length. For example, if the program length is 30 minutes, each column will equal 45 seconds. The Matrix Display will also provide messaging and feedback during the setup modes.

## Distance



Distance will be displayed in either Miles or Kilometers, depending upon the selection made in the console setup mode (see section titled [English Unit Mode and Metric Unit Mode](#)). The distance calculation is an estimation based upon the user's RPM.

## Calories

The *Calories* field tracks the estimated number of calories burned from the beginning of the program and is a derivative of the *Watts* generated, the user's *RPM* and the *resistance level*.



## Speed



Speed is displayed as Miles-per-Hour or Kilometers-per-Hour (depending upon the current console setting) and is based upon the revolutions per minutes (RPM).

## RPM



RPM or revolutions-per-minute. A revolution is defined as one complete foot rotation. RPMs are the number of complete rotations a single foot completes in sixty seconds.

## Scrolling Messaging Display



The Distance, Calories, Speed & RPM fields also serve as a messaging center. During the user and console setup modes, information will post or scroll information and instructions to aid the user.

## CONSOLE KEYS

### GO / QuickStart Key



From the Idle, Banner or Demo modes press the GO/QuickStart key to immediately launch the QuickStart program and bypass data entry. Pressing the GO/QuickStart key in the Setup mode will launch the displayed program.

### STOP Key



Pressing the STOP key during the Program Run mode will *pause* the unit for five (5) minutes. Pressing the STOP key twice will end the current program, post the Workout Summary and return the unit to the Idle mode. Pressing the STOP key consistently for two seconds will reset the unit, erase all user-entered data and return the console to the Idle mode.

### UP & DOWN Arrow Keys



The UP and DOWN arrow keys are the primary method for adjusting values in the setup modes. During the Program Setup mode, the UP/DOWN keys will adjust Age, Weight and Time entries. During the operation of a workout program, the UP and DOWN keys will adjust the resistance level or target heart rate setting.

## RIGHT Arrow Key



The RIGHT arrow key allows the user to select the displayed data when in the setup modes. During program run mode, the RIGHT Arrow Key toggles the data switching feature for the Total Time and Segment Time on and off.

## ENTER Key



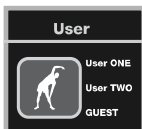
The ENTER key will confirm the selection of the displayed data during the *setup* modes.

## QuickSet Program & Resistance Keys

The QuickSet Program keys allow the user to quickly launch a program category with a single button press.

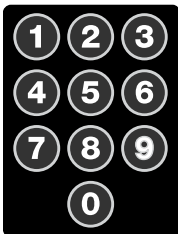
The QuickSet Resistance keys provide one-touch adjustments to the resistance during the program run mods.

## USER Key



The USER key offers a shortcut to launching the program. The last program associated with a user profile will be stored in the shortcut. Launching this program will require minimal key presses.

## Numeric Entry Keypad



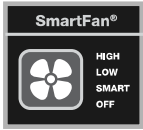
To speed the input of data, the 910 console is fitted with a numeric keypad. The user may input numeric data during the Setup Modes for Age, Weight, Target HR values.

## QuickSet Keypads.

QuickSet Programs	QuickSet Resistance
Interval	4
Hill Climb	8
Strength	12
Fat Burn	16
Heart Rate	20
Random	24
Lap	28
Fit Test	32

## CONSOLE FEATURES

### SmartFan® High Output Fan



This unit is equipped with a high-output fan to offer greater comfort during the workout. The adjustable louver allows the user to direct the airflow. Pressing the SMARTFAN button once will power the fan on in the *low* airflow setting. Pressing the button a second time will increase the fan speed to the *high* setting and maximum output. A third key press will turn on the SmartFan mode. As the user's work level increases, the fan output will increase. As the user's workload or effort decreases, so will the fan output.

### Visual Prompting

To provide visual cues for the user when data entry is required, the control and entry keys feature LED lamps which will light to indicate which options are available. The unlit keys are not active. This feature decreases the number of key options and speeds the data entry process.

### Media Bay

At the top of the console is a flip-top door which conceals a small tray. The tray is designed to accept various portable electronics, including Mp3 players, cellular telephones. Additionally, the 910 console offers a charging station for many Apple products, including the iPad, iPhone and iPod. To dock an Apple® product, open the media bay door and slide the iPad®, iPhone® or iPod® downward onto the power connector.<sup>1</sup>

### USB Charging

To allow charging of small electronics, including cellular telephones and Mp3 players, the 910 console is equipped with a USB charging port located inside the *media bay*. Some electronics may not charge. Power cords are not supplied.

### MP3/iPod Input Jack and Speakers

The 910 console offers an on-board amplifier and a pair of stereo speakers which can be connected to an Mp3 player, iPod or iPhone. Connect one end of a male-to-male stereo cable (not included) to the headphone jack (or audio out) on the device. Plug the other end of the cable into the port located at the top of the console, under the left edge of the media bay door.

Sound levels are controlled by the device so be sure to check the internal device settings if the noise level is not satisfactory.

### Tilt Viewing

The 910 is equipped with a tilting console to provide all users with a clear and direct view of the displays. The console pivots at the base. To tilt the console, firmly grasp the top of the console. Do not over-extend the tilt range as damage may occur.

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<sup>1</sup> Apple, iPod, iPhone and iPad are registered trademarks of Apple.

## CONSOLE OPERATION

### Glossary of Terms

<b><i>Banner/Idle Mode</i></b>	The Banner Mode may also be described as the Idle Mode. Power is supplied to the console and all segments and keypad LED lamps will light in sequence to indicate that the unit is ready for operation. Programs and Setting modes may be launched from the Banner Mode. The Banner Mode will time out in four (4) minutes and enter Power Save Mode if no input is received in the form of console key presses or pedal rotation.
<b><i>Demo/Idle Mode</i></b>	The Demo Mode operation is identical to the Banner Mode except the console will never power off and does not enter the Power Save Mode. Primarily used for in-store displays, the console ships with the factory default of “Demo Mode <b>On</b> ”. The user may choose between the Demo Mode and the Banner Mode in Console Setup mode (see the section titled <u><i>Console Setup</i></u> ).
<b><i>Power Save Mode</i></b>	The unit will be plugged in, but no power will be supplied to the console. Pressing any key on the console will launch the Banner Mode. The unit will enter Power Save mode after five (5) minutes of inactivity.
<b><i>LCD</i></b>	An acronym for <i>liquid crystal display</i> . The 910 display screen is an LCD with integrated backlighting for excellent visibility.
<b><i>Watts</i></b>	A unit of measurement which correlates to the rate energy is generated.
<b><i>Resistance Level</i></b>	Also called <i>intensity level</i> . The load applied to the workout by the unit. The higher the intensity level, the higher the resistance. There are thirty-two (32) resistance levels.
<b><i>Heart Rate Control</i></b>	Also called <i>Interactive or Heart Rate Control</i> . To maintain a constant heart rate target, the computer console will automatically adjust the resistance or load up or down to increase and decrease the user’s heart rate.
<b><i>Heart Rate Sensors</i></b>	Located on the fixed handlebar, the user can monitor their heart rate during a workout by simply gripping the touch heart rate sensors.

### Default Values

<b><i>Age</i></b>	35 years
<b><i>Weight</i></b>	150 pounds (68 kg if system is operating in metric mode)
<b><i>Time</i></b>	30 minutes
<b><i>Resistance Level</i></b>	Level 1



## English Unit Mode and Metric Unit Mode

The default unit setting for the console is the *English* measurement system. To toggle between the English and Metric unit modes, press and hold the UP and DOWN keys, simultaneously for two (2) seconds while in the Banner or Demo modes. "Set units" will post in the lower display screen while the Matrix Display will flash either "English" or "Metric" to indicate the current unit setting. Press the UP or DOWN keys until the desired unit mode is displayed. Press ENTER to accept the selection.

## Operating Notes

- Power On and Off** When the AC adapter is plugged into the unit, all LCD segments on the console will light to confirm power has reached the unit.
- Power Save Mode** In the power save mode, press any key or move the step arms to wake up the console and begin operation.
- Reset** To reset the console and clear all user data, press and hold the STOP key for two (2) seconds. When the program resets, the console returns to the Idle mode.
- Pause and Resume** The user may interrupt or *pause* a program for up to five (5) minutes during a workout. To *pause* the program, simply press the STOP button. To resume the program, press the GO key before the five (5) minute Pause mode times out.
- Resistance Levels** During the workout program, the user may press the UP or DOWN keys to adjust the resistance level. Manual resistance adjustments are not available in the heart rate interactive programs.
- Calculated Maximum Heart Rate** An estimated maximum heart rate which may be used to determine a threshold for safe exertion levels. The calculation is  $220 - \text{AGE} = \text{Calculated Maximum Heart Rate}$ .

## PROGRAMMING FEATURES

### Elapsed Time and Remaining Time Switching

While running a program, the Total Time and Segment Time values will switch between *elapsed* and *remaining*. The user may stop the switching and display the current view by pressing the Right Arrow key. Pressing the key again will return the display to switching mode.

### Workout Summary

For additional user feedback, the 910 console provides a brief Workout Summary immediately following the completion of the workout session. "END" will post in the Matrix Display and total Time, Distance and Calorie values for the workout will be displayed for thirty (30) seconds. The console will then return to the Idle screen.

## CONSOLE SETUP

### Console Default Settings

This unit is shipped with the default values appropriate for the U.S. market.

<u>Setting</u>	<u>Default/Factory Setting</u>	<u>Available Settings</u>
<b>Units</b>	English	English, Metric
<b>Model</b>	Will match the current unit model	910Er, 910Sr, 910Ub
<b>Sound</b>	On	On, Off
<b>Backlight</b>	High	High, Low
<b>Demo Mode</b>	On	On, Off

### Console Setup Launch

If the user would like to update the default values, pressing the UP and DOWN arrows keys simultaneously for two (2) seconds will launch the Console Setup mode.

<b>Units Setup</b>	When the Console Setup mode is launched, “Set Units” will post in the lower display field. “English” or “Metric” will flash in the Matrix Display, depending upon current setting. Use the UP or DOWN arrow keys to scroll through the available settings and press the ENTER key to select the displayed option. Press ENTER to launch the Model Number Selections mode. Changing the units will erase all user data.
<b>Model Number</b>	“Set Model Number” will post in the lower display field. “910Sr”, “910Ub” or “910Er” will flash in the Matrix Display, depending upon current setting. Confirm the model number of your unit. Use the UP and DOWN arrow keys to view the available settings. When the correct model is displayed, press ENTER to select and launch the Sound Settings mode.
<b>Sound Settings</b>	“Sound Setting” will post in the Lower Display. “Sound” will also post in the Matrix Display, followed by a flashing “On” or “Off” to indicate the current setting. Scroll between the two settings via the UP and DOWN arrow keys, pressing the ENTER key to confirm the selection and launch the Backlight Settings mode.
<b>Backlight Settings</b>	“Backlight Setting” will post in the Lower Display. “Backlight” will scroll once in the Matrix display, followed by a flashing “High” or “Low” to indicate the current setting. Scroll between the two settings via the UP and DOWN arrow keys. Confirm the setting by pressing the ENTER key. Demo Mode Settings will launch

**Demo Mode Setting** “Demo Mode settings” will post in the lower display. “Demo Mode” will also scroll once in the Matrix Display, followed by a flashing “On” or “Off” to indicate the current setting.

- *Demo Mode On* = console never powers off.
- *Demo Mode Off* = console power off after four (4) minutes of inactivity.

Scroll between the two settings via the UP and DOWN arrow keys, pressing the ENTER key to confirm the selection and launch the Total Time and Total Distance viewing mode.

**Total Time & Total Distance Values** “Total run time” will post in the Lower Display field, followed by the value representing the length of time the unit has been operated. “Total distance” will then post followed by the total cumulative time value. This value represents the amount of time the unit has been in one of the program Run modes. The console will then return to the Idle screen.

## QUICK START PROGRAM

The QuickStart program option is for users who wish to bypass the User Setup mode and immediately launch a workout session. Adjustments to the resistance can be made at any time via the UP and DOWN keys.

**Selection** Press the GO/Quick Start key to launch the Manual program with the following defaults values:

- Time = 30 minutes
- Resistance Level = 1

**Launch** Once the program begins:

- Program Run Time will count down from 30:00 minutes.
- The Pulse display will show a heart rate if a signal is detected via the touch heart rate sensors or the wireless pulse receiver.
- The Matrix Display will show the workout profile.
- The lower data display fields will track Distance, Calories, RPM & Speed.
- The UP and DOWN arrow key lamps will flash to indicate that user adjustments are allowed.
- The user may adjust the resistance level from 1 to 32 during the program via the UP and DOWN arrow keys.
- Press the STOP key once to enter the Pause mode. Pressing the STOP key again will return the console to Program Run mode.

**End** When thirty (30) minutes have elapsed, the Workout Summary will be displayed.

## HEART RATE PROGRAMS

Diamondback's Heart Rate programs can also be described as a *heart rate control programs*. Heart rate control programs automatically increase and decrease the load or resistance levels during the workout to help keep the user's heart rate near a selected heart rate target.

For example, if the heart rate target is 132 BPM, and the user's pulse begins to fall, the 910 computer will slowly increase the resistance level. Eventually, the amount of work being performed by the user will increase and so will the heart rate. Conversely, if the user's heart rate climbs above the targeted range, the resistance will decrease, allowing the user's heart rate to fall.

The advantages of heart rate control programs are the simplicity and accuracy by which the ideal cardio-vascular training zone is maintained thereby offering a very efficient workout.

For the Target Heart Rate programs to operate, the computer must receive a heart rate signal from the touch heart rate sensors or a wireless heart rate transmitter.

For the greatest cardio-vascular benefit, most persons should target a heart rate that is between 60% and 85% of their *calculated maximum heart rate*. An individual's calculated maximum heart rate is estimated as 220 BPM, minus their age. It is unsafe to exceed 90% of this calculated heart rate.

**NOTE:** *The computer bases all heart rate targets and maximums on the data entered during the User Setup modes. For an effective and safe workout, please enter the correct data for the current user.*

**NOTE:** *The 910 is programmed to warn the user if the heart rate exceeds 95% of their maximum. If use is continued at an unsafe level, the console will end the program as a safety precaution. If this happens unexpectedly, verify that the age value for the current user is correct.*

**NOTE:** *All Heart Rate programs require a pulse signal to be received via the touch heart rate sensors or chest strap (not included). If a signal is not received, the program will end after thirty (30) seconds.*

See the sections titled [Heart Rate is an Important Key to Your Exercise](#) and [Your Estimated Maximum Heart Rate & Target Training on Zone](#) for more information regarding target heart rate calculations.

There are three types of heart rate control programs embedded in the 910 console: *Heart Rate Interval*, *Target Heart Rate* and *Percentage Heart Rate* (50%, 60%, 70% & 80%).

## Heart Rate Program Overview

- Heart Rate Interval** The Interval heart rate training program is similar to the classic interval program with the exception that the resistance levels for each *work* (high) level and *rest* (low) level are determined by the user's personal calculated maximum heart rate (see the section titled Calculated Maximum Heart Rate). These calculated work and rest resistance levels will automatically adjust to help the user achieve the targeted heart rate for each segment.
- Target Heart Rate** The Target Heart Rate program allows the user to select a heart rate value (in beats-per-minute). The console will automatically vary the resistance to ensure the desired heart rate value is maintained throughout the workout session.
- Percentage Heart Rate** The Percentage Heart Rate programs can also be described as “percent-of-maximum heart rate” programs. The setup and operation of these programs is similar to the Target Heart Rate programming except the console will automatically determine the specific pulse rate target based on the data entered in the user profile and the selected percentage (50%, 60%, 70% & 80%) of their calculated maximum heart rate. See the section titled Calculated Maximum Heart Rate.

## Heart Rate Program Selection



From the Idle mode, press the HEART RATE key in the QuickSet Program keypad to open the heart rate category. “Heart Rate Interval”, the first of the available heart rate program titles, will post in the Lower Display. Scroll through the available options (Heart Rate Interval, Target Heart Rate, HR 50% max, HR 60% max, HR 70% max, HR 80% max), via the UP and DOWN arrow keys. Press the ENTER key to select the displayed program and launch the Heart Rate Programs Setup Mode.

## Heart Rate Programs Setup Mode

Once a Classic Program has been selected on-screen messaging will guide the user throughout the Setup Mode.

### User Selection

“Select user” will post in the Lower Display. “User 1” or the previously-entered User 1 name value will scroll in the Matrix Display. Use the UP and DOWN arrow keys to view the user selection options (“User 1”, “User 2” or “Guest”). When the desired user profile is displayed, press the ENTER key to select.

#### **User 1 / User 2**

If the User 1 or User 2 profiles are selected and the User Setup mode steps for the selected profile have not been completed, the console will launch the User Setup mode to obtain the necessary information (see the section titled User Setup Mode for more information). Once the console has stored the required information, the program will launch.

### Guest User

If the Guest profile is selected, the user will be prompted to enter their age value. To ensure the program operates safely, it is important to enter the correct user information.

### Target Heart Rate Selection *(Target Heart Rate program only)*

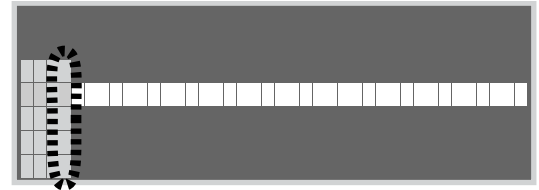
If the Target HR program has been selected, the user must also provide the target heart rate in beats-per-minute (BPM). Adjust the displayed value via the UP and DOWN arrow keys, pressing ENTER to confirm and launch the program.

### Heart Rate Programs Launch Mode

**NOTE:** *All heart rate programs rely upon the user's pulse signal to operate. If no heart rate is detected, the program will not operate for more than thirty (30) seconds.*

**General** All Heart Rate programs will operate with the following features:

- The Matrix Display will post a horizontal bar to represent the target heart rate. The user's progress within the program will be displayed as a flashing vertical stack.
- The user's actual heart rate will be represented as a stack of vertical segments. Each column represents 1/40<sup>th</sup> of the total program run time. A flashing column that is below the horizontal line indicates that the user's heart rate is less than the selected target. Conversely, a flashing segment above the horizontal line signifies a heart rate that exceeds the user's target.
- The Level display will indicate the current resistance level. The range is from 1 to 32.
- Total Time field will display the progress made in the total workout. Segment Time will display the progress made in the current segment. The displays will switch between *elapsed* and *remaining* time. *Elapsed time* will count up, while *remaining time* will count down. To freeze the switching and display only elapsed or remaining time, press the RIGHT arrow key while the desired display is visible. Press the RIGHT arrow key again to resume switching mode.
- The Watts field will display the current output or work being generated by the user.
- Total Distance for the current workout session will be displayed.
- The Heart Rate Display cluster will monitor the user's current heart rate and the bar graph will provide general information regarding the user's current percentage of maximum heart rate.
- If no signal is detected, the Pulse field will display "--" and the No Signal icon will light.
- When a pulse signal is received, the rate will be displayed and the DB/Heart icon will be flash.
- When the user's heart rate is near the target value, the Target Heart Rate Achieved segment will light.



- The Calories field will record the number of calories burned during the workout session.
- RPM or revolutions per minute and Speed will be displayed.
- Visual Key Prompting will operate. The LED lamps on the keypad will flash to indicate which keys may be used to make adjustments to the current programming.
- If the user's heart rate exceeds the calculated maximum, "WARNING. HR too high." will post in the Lower Display. If the heart rate exceeds 90% of the user's calculated maximum heart rate for thirty (30) seconds, the program will end.

## **Heart Rate Interval**

- The Heart Rate Interval program will alternate between periods of work (80% of max) and rest (60% of max) heart rate targets.
- The length of each segment is dependent exclusively upon the amount of time the user requires to reach the targeted heart rate.
- The resistance level will automatically adjust to increase or decrease the heart rate. When the target heart rate for each segment is achieved for five (5) seconds, the program will adjust the resistance to achieve the next heart rate target.
- The lower display will post messaging at the beginning of each segment to signal the user to increase or decrease their speed to aid in the heart rate increase and decrease.
- The upper and lower targets can be adjusted via the UP and DOWN arrow keys (Upper range = 65% - 80%; Lower range = 60% - 75%).

## **Target Heart Rate**

- The console will automatically vary the resistance to ensure the desired heart rate value is maintained throughout the workout session.
- When the user's heart rate is within the target range, the Target Heart Rate Achieved segment will light.

## **Percentage Heart Rate**

- Depending upon the Percentage Heart Rate program selected (50% Max, 60% Max, 70% Max, 80% Max).
- Resistance adjustments will be controlled by the program to ensure the user's heart rate remains within +/- four (4) BPM of the selected target heart rate.
- If the current heart rate is within the target range, the Target Heart Rate Achieve icon will light.

## **Ending a Heart Rate Program**

At any time during the program, the user may press the STOP key to pause the programming for up to five (5) minutes. To restart the current program, press the GO key. To end the program and view the Workout Summary, press the STOP key twice while the program is running. Pressing the STOP key three (3) times while the program is running will end the program, bypass the Workout Summary and return the console to Idle mode.

## FIT TEST PROGRAM

### Fitness Test Overview



The Fitness Test program has been incorporated within the 910 console to provide the user with the ability to measure and track their fitness gains at home. The Diamondback Fitness version of this test is based upon the standards and protocol the YMCA employs for the measurement and tracking of an individual's progress towards their personal fitness goals. It should be mentioned that the information provided by this test is relative in nature and is not meant to serve as a precise measurement of one's physical fitness or cardiovascular capacity.

**How the Test Works.** During physical exertion, muscles convert oxygen into the fuel needed for the energy to perform the required tasks. The harder the muscles work, the more oxygen the muscles require. This oxygen is delivered to the muscles via the cardiovascular (blood) system. To keep pace with the increased oxygen demand, the heart increases the delivery of oxygenated blood by pumping blood through the system faster. As one's fitness level improves, the heart muscles become more efficient at extracting oxygen from the blood and will ultimately require less energy to produce the same amount of work. Since the blood flow requirement is not as great, the heart will beat slower. The Fitness Test program utilizes this basic knowledge to determine the user's relative fitness level. The test will introduce the user to predetermined workloads while the reaction of the heart is monitored. At the end of the test, a score, based upon the user's results, will post in the lower display. This score serves as a basis to track future test results against. It is advisable to periodically incorporate the Fitness Test program into the user's workout.

**NOTE:** *The user must provide a heart rate signal via the touch heart rate sensors, or a wireless chest strap transmitter for the Fitness Test program to operate. If no signal is received for a period of thirty (30) seconds, the program will end.*

### Fitness Test Program Setup and Launch

To begin, press the FIT TEST key, followed by the ENTER key to launch the Program Setup mode.

#### User Selection

"Select user" will post in the Lower Display. "User 1" or the previously-entered User 1 name value will scroll in the Matrix Display. Use the UP and DOWN arrow keys to view the user selection options ("User 1", "User 2" or "Guest"). When the desired user profile is displayed, press the ENTER key to select.

#### **User 1 / User 2**

If the User 1 or User 2 profiles are selected and the User Setup mode steps for the selected profile have not been completed, the console will launch the User Setup mode to obtain the necessary information (see the section titled User Setup Mode for more information). Once the console has stored the required information, the program will launch.

#### **Guest User**

If the Guest profile is selected, the user will be prompted to enter their age and weight value. To ensure the program operates safely, it is important to enter the correct user information.



## Program Launch

When the Fit Test program launches:

- The console must detect a heart rate to operate.
- The console must detect the user's RPM. If no movement is detected, the unit will enter Pause mode after five (5) seconds of inactivity. To resume the program, begin rotating the pedals and press the GO key.
- The Lower Display will post "Pedal at 50 RPM."
- The Matrix Display will post a horizontal line of segments which show the projected resistance profile and actual resistance profile history. This profile may change as the user's heart rate data is received and the program adjusts.
- If the user's heart rate signal is detected, the heart rate bar graph and DB/heart icon will light
- All other displays will function normally.

**Stage One** The program will begin with Stage One, a three (3) minute warm-up session.

**Stage Two, Three and Beyond** Programming will continue, prompting the user to maintain 50 RPM. After each three (3) minute stage, the next stage will begin with an increased level of resistance. The program will continue until the user successfully completes the test, or the program ends due to lack of input or improper/unsafe heart rates.

## Ending the Fit Test Program

### Successful Test Results

If successful, the Fit Test program will end after the user's heart rate exceeds 110 BPM for two stages.

The console will beep to signify the ending of the program and the Lower Display will post "MAX METS =" followed by the fitness rating. "MAX METS" represents your functional capacity for aerobic exercise. It is expressed in METS, or metabolic units. This value factors the user's body weight, but not age or gender (*see the chart to the right*).

Knowing one's functional capacity can also tell you how difficult it may be to perform certain activities. To illustrate, cycling at 3 mph generally requires about 3 to 8 METS whereas fast cycling at 10 mph requires roughly 7 METS. Armed with a personal MAX METS score, the user can make judgments regarding their exercise regime. For example, if a person's functional capacity is 6 METS, one would be able to determine that riding a bicycle at 10 mph for an extended period of time would be quite difficult (without actually riding the bicycle).

For more information on the METS exertion scale and The ACSM (American College of Sports Medicine) visit the website [www.acsm.com](http://www.acsm.com).

At the completion of the Fitness Test, the user's results will be returned. See the chart above for a brief description of the METS scores.

Value	Score
2.0 - 2.9	Poor
4.0 - 6.9	Low
7.0 - 10.9	Average
11.0 - 13.9	Good
14.0 - 16.0	High

*Fit Test Max Mets Values*

### Unsuccessful Results

If the test was unsuccessful, the Lower Display will post “Unable to complete test.” The Fit Test may not be able to complete the test for a variety of reasons:

- *The STOP key was pressed*      The program was concluded before enough information could be gathered. No test results are posted.
- *Heart Rate Too High*              If the user’s heart rate reached 85% of Max for more than thirty (30) seconds, the program will end. Depending upon the previous progress made in the test, the METS score may, or may not be provided.
- *No RPM / RPM Too Low*          If the console does not detect an adequate RPM, the console will enter Pause mode. If the program is paused and resumed several times, it is possible that no fitness score will be returned.
- *No Pulse Signal*                      If a pulse signal is not detected by the console for a period of thirty (30) seconds, the program will end and the test will be unsuccessful.

When an unsuccessful Fit Test result is returned, the program will end and return to the Idle mode.

## CLASSIC PROGRAMS

### Classic Programs Overview

Interval, Hill Climb, Strength, Fat Burn, Random and the Lap programs are considered *classic* programs.

#### Interval



The six (6) Interval programs offer profiles with periods of high exertion alternating with periods of rest. Intervals are an excellent way to increase endurance.

#### Hill Climb



The Hill Climb programs simulate climbing exercises with six (6) preset hill profiles.

#### Strength



The Strength program category offers six (6) workout profiles. Each is designed to gradually increase the resistance to help build the users strength and endurance.

#### Fat Burn



The three (3) Fat Burn programs are designed to maintain a relatively low level of exertion over the course of the workout. Keeping the heart rate at the lower range encourages weight loss.

## Random



The five (5) Random programs are designed to offer the greatest amount of variety within the workout. The profiles will incorporate varied levels of resistance to simulate a hiking trail's non-patterned terrain.

## Lap



The *5K Lap* and *10K Lap* programs simulate a traditional running track course. Depending upon the profile selected, the user will travel 5 or 10 Kilometer in one loop. The eighty-four (84) segments will represent 1/84<sup>th</sup> of the total distance. The user's progress in the program will be displayed as a flashing cursor on the lap course. The lap will begin and end at the arrow at the lower right corner of the profile.

## Classic Program Selection

From the Idle mode, press the QuickSet Program key to open the desired category. The first available course profile will post in the Display Matrix. Use the UP and DOWN arrow keys to view all course profiles. Press the ENTER key to select the displayed profile and launch the Classic Programs Setup Mode.

## Classic Programs Setup Mode

Once a Classic Program has been selected, on-screen messaging will guide the user throughout the Setup Mode.

**NOTE:** *The user may press the GO key at any time during the Setup mode to bypass the setup and begin the workout immediately the with previously-saved default values. Note that the heart rate feedback will only be accurate if values for the selected profile are correct for the current use.*

## User Selection

"Select user" will post in the Lower Display. "User 1" or the previously-entered User 1 name value will scroll in the Matrix Display. Use the UP and DOWN arrow keys to view the user selection options ("User 1", "User 2" or "Guest"). When the desired user profile is displayed, press the ENTER key to select. Guest user will run with default data and will not operate all heart rate functions.

If the User Setup steps for the selected profile have not been completed, the console will launch the User Setup mode (see the section titled [User Setup Mode](#) for more information), otherwise, the program will launch immediately.

## Classic Programs Launch Mode

Once the Classic programs have launched:

- The Matrix Display will post the workout profile and the current progress in the program will be indicated by a flashing stack of segments. The height of the stacks represents the level of resistance; the higher the stack, the greater the resistance. The resistance may be adjusted manually via the UP and DOWN arrow keys.

- The Level display will indicate the current resistance level. The range is from 1 to 32.
- Total Time field will display the progress made in the total workout. Segment Time will display the progress made in the current segment. The displays will switch between *elapsed* and *remaining* time. *Elapsed time* will count up, while *remaining time* will count down. To freeze the switching and display only elapsed or remaining time, press the RIGHT arrow key while the desired display is visible. Press the RIGHT arrow key again to resume switching mode.
- The Watts field will display the current output or work being generated by the user.
- Total Distance for the current workout session will be displayed.
- The Calories field will record the number of calories burned during the workout session.
- RPM or revolutions per minute and Speed will be displayed.
- Visual Key Prompting will operate. The LED lamps on the keypad will flash to indicate which can be keys can be used to make adjustments to the current programming.

## Ending a Classic Program

At any time during the program, the user may press the STOP key to pause the programming for up to five (5) minutes. To restart the current program, press the GO key. To end the program and view the Workout Summary, press the STOP key twice while the program is running. Pressing the STOP key three (3) times while the program is running will end the program, bypass the Workout Summary and return the console to Idle mode.

## USER SETUP MODE

The User Setup mode may be launched in two ways:

- To manually enter the User Setup mode, press and hold the USER arrow key for two (2) seconds.
- During the Program Selection mode, if a user profile is selected for the first time, User Setup mode will launch automatically, then return to the Program Setup mode.

When the User Setup mode is launched, “User 1” will display in the Matrix Display. Use the UP and DOWN arrow keys to view the user profile options (“User 1” or “User 2”). Press ENTER when the desired profile is displayed.

## User Name Data Entry

“User 1 Name” or “User 2 Name” will post in the lower display and “User 1” or “User 2” will post in the Matrix Display field (depending upon which user profile was selected). Pressing the ENTER key will allow the user to personalize the data for the displayed profile. If the user name has been previously adjusted, the entered name will then scroll once and post with the first character blinking. Adjust the first character via the UP and DOWN arrow keys. Press the RIGHT arrow key to confirm the character selection and move to cursor the next character. The choice of available characters is A - Z, a - z, 0 - 9 and the “\_” (space). The user may store up to ten (10) characters for each user name. If the desired name is less than ten (10) characters, press ENTER to save settings and launch Workout Time data entry.

## User Workout Time Data Entry

“Workout time” will post in the lower display and the default value of “30:00” (or the previously-adjusted value) will flash in the Total Time display. Use the UP and DOWN arrows to adjust the workout time for this user profile. The range for workout time is 01:00 to 1:59:00. Press ENTER to confirm the workout time and enter Age data entry.

## User Age Data Entry

“User 1 Age” or “User 2 Age” will post in the lower display (depending upon which user profile was selected). The default or previously-adjusted user age value will flash in the Matrix Display. Use the UP and DOWN arrows to adjust the age for this user profile. The available user age value must be between ten (10) and ninety-nine (99) years, inclusive. Press the ENTER key to confirm the age setting and enter User Weight entry.

## User Weight Data Entry

“User 1 weight” or “User 2 weight” will post in the lower display (depending upon which user profile was selected). The default or previously-adjusted user weight value will flash in the Display Matrix. Use the UP and DOWN arrows to adjust the weight for this user profile. The available user weight value must be between 23 and 350 pounds (or 10 and 150 Kilograms if the console is set to metric units), inclusive. Press the ENTER key to confirm the weight setting and enter User Gender entry.

## User Gender Data Entry

“User 1 gender” or “User 2 gender” will post in the lower display (depending upon which user profile was selected). The default or previously-adjusted user gender value will flash in the Display Matrix. Use the UP and DOWN arrow keys to view the user gender options (“Male”, “Female”). To select the displayed gender setting, press the ENTER key. Press the ENTER key to return to the User Setup profile selection mode, or press STOP to save all adjusted settings and return to Idle mode or previous program.

## MAINTENANCE

All Diamondback Fitness products are engineered for years of near-silent operation. Let noise be your first indication that a repair or adjustment is required. Please, discontinue use immediately and contact an Authorized Service Technician or Diamondback Fitness Dealer if an unusual noise, scraping, knocking, grinding or vibration is detected. Often, a minor issue will become a major repair if ignored and use is continued.

Prior to each workout, confirm that all adjustment levers and screws are tightened.

Your Diamondback Fitness product is manufactured of the most durable materials available. The plastics are molded of strong and chemical-resistant ABS and PVC. The frame is produced of high-tensile steel and protected with an industrial-grade, powder paint coating for the highest level of corrosion resistance. It is important to note however, that perspiration can be extremely corrosive if allowed to accumulate on the machine. After training, always wipe down the unit with a mild soap solution followed by a thorough drying with a clean towel. Positioning a small spray bottle and towel near the unit will help ensure that your Diamondback Fitness equipment looks new for many years.

***NOTE: Perspiration is very corrosive and if allowed to remain on the machine, will cause discoloration, fading, rust and odors. Unfortunately, these conditions are not covered under the Warranty Policy.***

## WARRANTY INFORMATION

Diamondback Fitness warrants this unit to be free from defects in material and workmanship under normal use in the home environment. Diamondback Fitness's obligation under this warranty is limited to the repair or replacement of any defective part, provided free of charge through an Authorized Service Agent. This warranty is extended to the original purchaser. The following conditions apply:

### Who is Covered

The warranty is extended to the individual whose name appears on the Warranty Registration filed with Diamondback Fitness and may not be transferred to any other individual or legal entity. In the absence of a valid Warranty Registration, the original sales receipt will serve as satisfactory documentation of the valid warranty status.

### To Obtain Service

To obtain service, you must contact your Authorized Diamondback Fitness Dealer. Your dealer is also your Authorized Service Agent. An Authorized Service Agent must diagnose your unit to begin the warranty claim process.

### Warranty Registration

Warranty commitments are valid only with a completed Warranty Registration. Registration is available online at [www.diamondbackfitness.com](http://www.diamondbackfitness.com). Alternatively, a warranty card may be mailed to Diamondback Fitness. (See page 33)

### Proof of Purchase

Proof of purchase from a Diamondback Fitness Authorized Dealer will be required if the warranty card is not registered.

### What is Covered – For Interior Residential Use Only.

- Frame Limited lifetime warranty (covers defects in welds, materials, and workmanship; some exclusions apply).
- Parts & Electronics 3 years
- Labor 1 year
- Wear Items 90 days

**NOTE:** *If proof of purchase cannot be confirmed, the Warranty's coverage period will begin on the date six (6) months after the date of manufacture.*

**NOTE:** *Limited lifetime refers to warranty coverage of the unit's expected service life, not the lifetime of the purchaser. The expected lifetime of this unit is five (5) years from the date of purchase although other factors can extend this period. Support and maintenance of the unit may become difficult or impossible after this period expires.*

## Voided Warranty

The warranty does not apply to any failure of the product or its components due to alterations or modifications, misuse and abuse, accidental damage, lack of maintenance or improper assembly. Improper assembly can be avoided if the unit is assembled by an authorized technician. Damage due to improper assembly is not covered by the warranty. Common assembly errors can include damaged wire harnesses, stripped screws and nuts, crank arms or damaged threads. If the serial number has been removed, altered or defaced, the warranty for the affected unit is voided.

## Parts & Service

Contact the Authorized Diamondback Fitness Dealer which originally sold the unit. If you have moved, or the retailer is unavailable, visit the Diamondback Fitness dealer locator site at [www.diamondbackfitness.com](http://www.diamondbackfitness.com) to help locate an alternate Authorized Dealer.

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

**NOTE:** *Authorized service technicians do not reside in all areas of the country. If you live beyond the reasonable service area or metropolitan area, Diamondback Fitness may not be able to support the labor portion of the product warranty. Travel fees charged by technicians are not covered by the warranty.*

## Other Exclusions

The warranty for this unit is void if it is placed in commercial or light commercial environments such as health clubs, schools, hotels, condominium common areas, correctional facilities, or any other non-residential setting. The warranty will not be honored if this unit is employed for commercial or rental purposes. This unit is for indoor use only.

## Additional Rights

This Warranty is expressly in lieu of all other warranties, and any implied warranties of merchantability or fitness for a particular purpose created hereby, and are limited to the same duration as the express warranty herein. Diamondback Fitness shall not be liable for any incidental or consequential damages. Some states do not allow the exclusion or limitations of implied warranties, incidental or consequential, so the above limitations and exclusions may not apply to you. Retailers and wholesale outlets for Diamondback Fitness products are not authorized to modify this warranty in any way. This warranty gives the original owner specific legal rights. Other additional rights may vary from state to state.



## WARRANTY REGISTRATION CARD

Please return the completed warranty registration card to Diamondback Fitness within 15 days of purchase. Failure to comply may void the warranty. You may register your product at [www.diamondbackfitness.com](http://www.diamondbackfitness.com).

Name (last, first)

Address

City  State/Province  Zip/Postal Code

Daytime Telephone   -  Evening Telephone   -

---

Dealer / Store Name

Dealer's Address

City  State/Province  Zip/Postal Code

---

Model **910Er** Serial Number **E**  Date of Purchase  -  -

Mail Completed Form To: **Diamondback Fitness – Warranty Card 6004 S 190th Street Suite 101 Kent, Washington 98032**



# 910Er Owner's Manual

## PURCHASER'S REFERENCE INFORMATION

**Product Name:** Diamondback Fitness 910Er Elliptical

**Serial Number:** E \_\_\_\_\_

Record the serial number here.

### Serial Number Location

The serial number will be located at the rear of the unit, just below the transport handle (see figure to the right).

### Record of Purchase

**NOTE:** *Please record details associated with the purchase of your Diamondback Fitness 910Er below. This information will be required in the event the unit requires future service. ATTACH THE PURCHASE RECEIPT.*

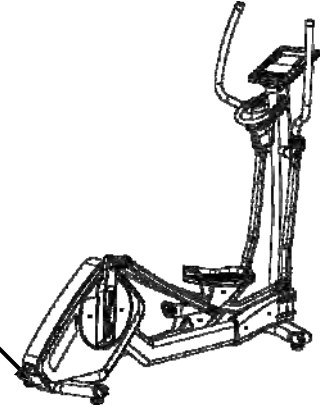
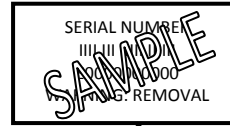
Dealer Name: \_\_\_\_\_ Dealer Telephone Number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

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

Date Purchased: \_\_\_\_\_ Dealer Contact Name: \_\_\_\_\_

### To Activate Your Warranty

Please register the unit at [www.diamondbackfitness.com](http://www.diamondbackfitness.com). Failure to comply may limit or void your warranty coverage.





# DIAMONDBACK

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## **DIAMONDBACK FITNESS**

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