460Ub

460Ub

460Ef

460Rb

Diamondback

f i t n e s s

460 Series Owner's Manual

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 460 _ _

Serial Number: P _ _ _ _ _ _ _ _ _

To Activate Warranty:

REGISTER YOUR WARRANTY AT

www.diamondbackfitness.com

OR COMPLETELY FILL OUT THE ATTACHED WARRANTY CARD (SEE BACK COVER) AND RETURN TO DIAMONDACK FITNESS WITHIN 15 DAYS OF THE DATE OF PURCHASE. FAILURE TO COMPLY WITH THE WARRANTY ACTIVATION PROCEDURE MAY VOID THE MAN-FACTURER'S WARRANTY.

SERIAL NUMBER
P0305670002

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WARNING REMOVING OR ALTERATION OF THIS LABEL VOIDS WARRANTY

Serial No. Sticker

Serial No. Sticker

Serial No. Sticker

Dealer Name:

Dealer Address:

Dealer Telephone 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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Congratulations on the purchase of your new 460 Series fitness equipment. We want to do everything possible to make your experience with Diamondback the best it can be. So please review the enclosed owner's manual, which will illustrate the reliable quality, excellent value and added features that Diamondback is known for. You can rely on ease of use, comfort, and our desire to make your workout something you will look forward to on a regular basis. Please take a moment to review the complete 460 product line, as well as the rest of our products, at www.diamondbackfitness.com.

Your feedback and ideas about your experience with Diamondback are very important to us. Write to our product development department at 300 Camarillo Ranch Road, Camarillo, CA 93012.

For more information or questions regarding your 460 model unit, please go to our website at www.diamondbackfitness.com. Or please contact us:

Diamondback Fitness
300 Camarillo Ranch Road,
Camarillo, CA 93012
Ph. 1.800.776.7642
Fax: 1.805.388.5890

The 460 model units are 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 460 MODEL UNIT.
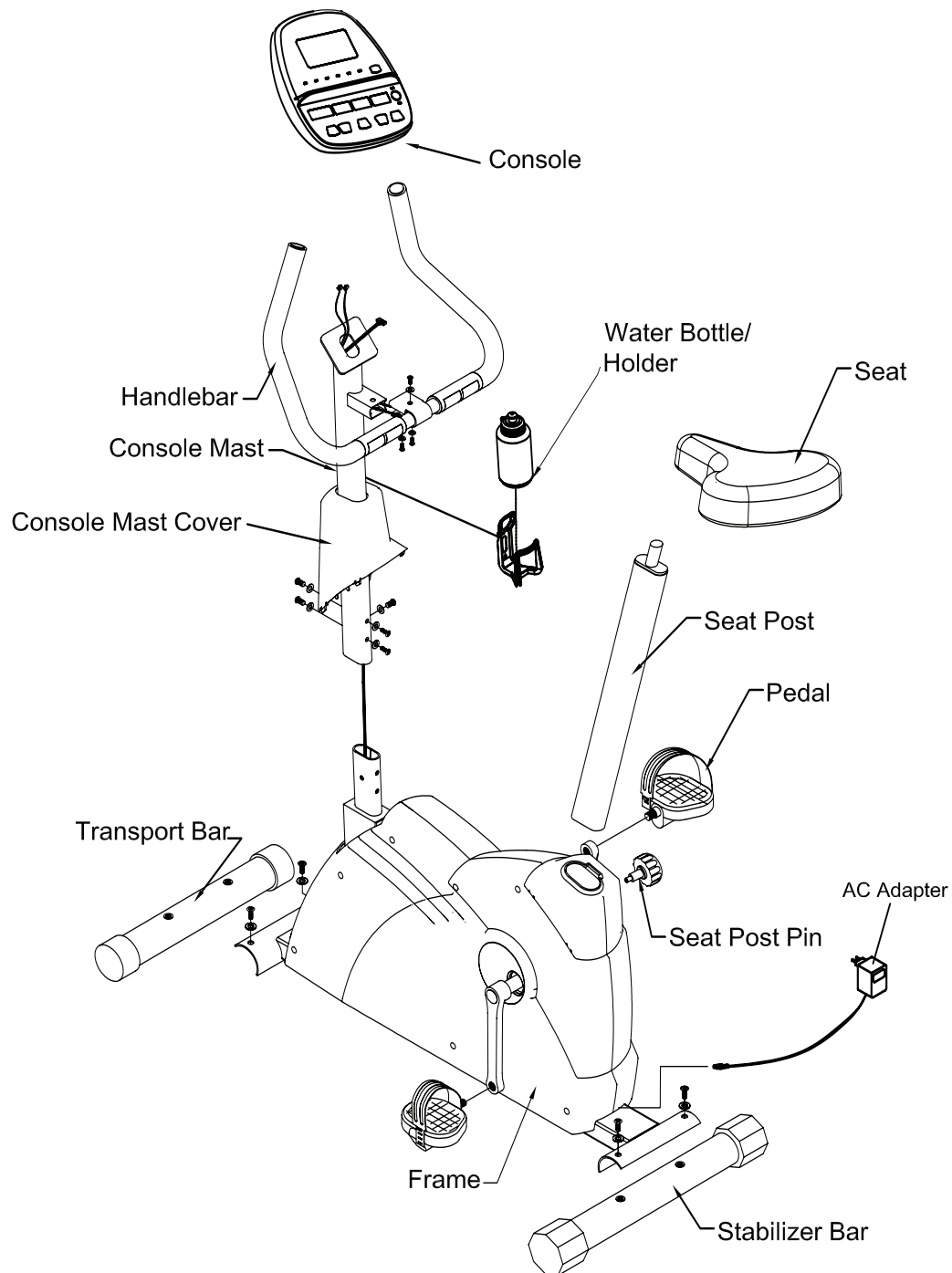
CAUTION – FOR SAFE OPERATION

1. Before beginning any exercise program on the 460model unit 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.
2. If over the age of 35 or overweight, consult with your physician before beginning any exercise program.
3. Pregnant women should consult with their physician before beginning an exercise program.
4. If you experience dizziness, nausea, chest pains or other abnormal symptoms during exercise, stop the exercise session immediately. Consult your physician before continue your exercise.
5. Always drink fluids if you exercise for twenty or more minutes on any 460 model unit.

WARNING – TO REDUCE RISK OF INJURY TO YOURSELF OR OTHERS

1. To ensure proper functioning of your 460 model unit, do not install attachments or accessories not provided or recommended by Diamondback.
2. Always wear proper clothing and shoes when exercising on any 460 model unit.
3. User weight in not to exceed 275 pounds / 125 kilograms.
4. Keep children away from 460 model unit. Hands and feet may get caught in the pedals or other moving parts which could result in serious injury.
5. Place the 460 model unit in an area that will meet minimum clearance requirements: Front, Back & sides: 2 feet/60cm
6. Keep 460 model units 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 460 model units are intended for indoor use in home environment. They are not intended for outdoor use.
8. Place your 460 model unit on a solid, level surface when in use.
9. Use the handlebars or handrails when getting on and off your 460 model unit.
10. Never operate the unit if it is damaged or broken. Contact your local authorized Diamondback Fitness dealer for service. Make sure all components are fastened securely (i.e. seat post, saddle, handlebars, and pedals) at all times.

Diamondback fitness

Console

Water Bottle/
Holder

Seat

Handlebar

Console Mast

Console Mast Cover

Seat Post

Pedal

Transport Bar

AC Adapter

Seat Post Pin

Frame

Stabilizer Bar

Frame and Seat Assembly
1. Place the unit and all accompanying parts in a clean, flat, and open space.
2. Attach the Stabilizer Bar to the rear of the frame using two M10 x 20mm bolts.
3. Attach the Transport Bar to the Front of the Frame using two M10 x 20mm bolts.
4. Loosen the seat pin by turning it counter clockwise 1-2 turns. Install seat post by sliding into the Seat Post receptor, pulling the Seat Pin out until a suitable hole is found.
   WARNING: Never mount the cycle unless the Seat Pin is fully and properly engaged in the Seat Post.
5. Place the Seat on the rod at the top of the Seat Post. Adjust the seat so that it is flat and pointing forward and then tighten the nuts on the Seat's bottom simultaneously using two wrenches.

Console Mast Assembly
1. Hold the Console Mast with the tube end facing down and slide the Console Mast Cover onto it as far as possible, with the tabs facing down.
2. Hold the Console Mast next to its mounting post on the front of the Frame. Feed the wire harness through the Console Mast so that it is attached on the Frame end and the other end comes out the top of the Mast.
3. Slide the Mast onto the mounting post. Be careful not to pinch the wire harness while doing this, doing so could cause the unit to malfunction. Attach the Mast to the mounting post using five M8 x 15 mm bolts and four M8 curb washers on the front and back of the mast, and an M8 flat washer on the side. Carefully snap the Console Mast Cover into place on the Frame.
4. Align the Handlebar with its post near the top of the Console Mast so that only one bolt hole is facing upward.   Feed the wires from the Handlebar up through the top of the Console Mast. Slide the handlebar onto the console Mast whole pulling gently on the wires to take up the slack. Attach the Handlebar to the Console Mast using three M8 x 15mm bolts and three M8 f flat washers.

Console Assembly
1. Connect the plugs from the main wire harness and the hand pulse harness to the plug receptors on the back side of the console, taking care to install correctly (See plug alignment marks)
2. Carefully feed the slack in the wires into the Console Mast and place the Console on the mounting plate
3. Fasten the console to the console mounting plate with four M5 x 15mm screws using a Phillips screwdriver.

Note: Console may be operated using batteries or the AC Adapter that came with the unit. If it is going to be operated using batteries the AC Adapter MUST be unplug from the unit.

Pedal Assembly
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 (R or L) on the top and bottom of each pedal. Please Note: the left pedal threads counterclockwise.
3. Retighten the cranks after approximately 10 hours of use.

Water Bottle
1. Place the bottle holder on the Console Mast. Insert and tighten the two ST5 x 15mm screws using a Phillips screwdriver.
2. Snap the water bottle into the holder.

Diamondback
f i t n e s s

Console

Handlebar

Console
Mast
Cover

Water Bottle/Holder

Adapter

Console
Mast

Pedal

Seat Back

Seat Pad

Seat Track
Cover

Seat Track

Transport
Bar

Handpulse
Cable

Seat Frame

Frame

Seat
Handlebar

Seat
Adjustment
Knob

Seat Track Support

Stabilizer Bar

Frame and Seat Assembly

1. Place the unit and all accompanying parts in a clean, flat, and open space.
2. Slice the Seat Track Support onto the lower bar of the Frame and bolt it in place using four M8 x 15 mm bolts and four M8 washers. Tip: Do not tighten all the way down any of the bolts until the Seat Track is in place.
3. Hold the Seat track up to the frame horizontally with the bolts facing the sides. Slide the Seat Frame and Seat Track Cover onto the middle of the Seat Track; checking to make sure they are oriented right side up and facing the correct direction.
4. Slide the front of the Seat track onto the upper bar of the Frame, while placing the rear end of the Seat Track into the upper arm of the Seat Track Support. Attach the Seat Track to the Frame using four M8 x 15 mm bolts, with two M8 washers on the front holes and two rubber stops on the rear holes. Attach the eat Track to the Seat Track Support using two M8 x 15mm bolts and two M8 washers.
5. Slide the Seat Track Cover along the Track to the Frame, and then thread the Hand Pulse Cable through the Cover. Snap the Seat Track Cover into place on the Frame by Squeezing gently along the sides, then pressing first the top two tabs and next the bottom tow tabs.
6. Place the Seat Handlebar on the Seat Frame with the metal pulse grip facing upward and the handles facing forward. Attach it in place using for M8 x10mm bolts and four M8 washers.
7. Place the Seat Pad on the Seat Frame with the wide end at the back and attach it using four M6 x 45mm bolts. Hold the Seat Back against the Seat Frame with wide end down and attach it in place using four M6 x 45 mm bolts.
8. Stretch the free end of the Hand Pulse Cable along the Seat Track to the back of the Seat and plug it into the wires from the Seat Handlebar. Align the Cable so that it will not be pinched by the Seat, test by moving the Seat back and forth, and then use the plastic zip tie provided to hold the wire against the Seat in this safe position.
9. Attach the Stabilizer Bar to the rear of the Seat Track Support using two M10 x 20mm bolts.
10. Attach the Transport Bar to the front of the Frame using two M10 x 20mm bolts.

Console Mast Assembly

1. Hold up the Console Mast with the tube end facing down and slide the Console Mast Cover onto it as far as possible, with the tabs facing down.
2. Hold the Console Mast next to its mounting post on the front of the Frame. Feed the wire harness through the Console Mast so that it is attached on the Frame end and the other end comes out the top of the Mast.
3. Slide the Mast onto the mounting post. Be careful not to pinch the wires while doing this, doing so could cause the unit malfunction. Attach the Mast to the mounting post using three M8 x 15mm bolts and three M8 arc washers (bent). Carefully snap the Console Mast Cover into place on the Frame.
4. Align the Handlebar with its post near the top of the Console Mast so that only one bolt hole is facing upward. Slide the handlebar onto the Mast and attach it using three M8 x 15mm bolts and three M8 flat washers.

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Console Assembly
1. Connect the plugs from the main wire harness and the hand pulse harness to the plug receptors on the back side of the console, taking care to install correctly (See plug alignment marks)
2. Carefully feed the slack in the wires into the Console Mast and place the Console on the mounting plate
3. Fasten the console to the console mounting plate with four M5 x 15mm screws using a Phillips screwdriver.

Note: Console may be operated using batteries or the AC Adapter that came with the unit. If it is going to be operated using batteries the AC Adapter MUST be unplug from the unit.

Pedal Assembly
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 (R or L) on the top and bottom of each pedal. Please Note: the left pedal threads counterclockwise.
3. Retighten the cranks after approximately 10 hours of use.

Water Bottle
1. Place the bottle holder on the Console Mast. Insert and tighten the two ST5 x 15mm screws using a Phillips screwdriver.
2. Snap the water bottle into the holder.

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Console

Handrail (R)

Console Mast

Handrail (L)

AC Adapter

Handrail Cover (R)

Handrail Cover (L)

Endcap (R)

Endcap (L)

Footpad (R)

Frame

Footpad (L)

Rear Stabilizer

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Frame Assembly
1. Place the unit and all accompanying parts in a clean, flat and open space.
2. Attach the Stabilizer Bar to the Frame using two M10 x 75mm bolts with two M10 nuts and 10.5mm arc (bent) washers. Tighten these bolts firmly using a box wrench on the nut.
3. Insert the front endcaps into both ends of the front stabilizer bar. Use two M5 x 15mm Phillips head screws to tighten them to the metal frame (Note: the endcaps are "keyed" so that they will fit into the stabilizer with the transportation wheels in the correct directions. The screws are self-tapping and may require some force to tighten them completely).

Console Mast Assembly
1. Hold up the Console Mast with the tube end facing down and slide the Console Mast Cover onto it as far as possible
2. Connect the plug to the plug receptor of the main wire harness inside the console mast, taking care to install correctly. (See plug alignment marks)
3. Slide the Mast onto the mounting post.
   Note: Be careful not to pinch the wires while doing this, doing so could cause the unit to malfunction.
4. Attach the Mast to the mounting post using four M8 x 15mm bolts and three 8.5 arc washers (bent).
5. Snap the Console Mast Cover into place on the Frame.

Console Assembly
1. Connect the plugs from the main wire harness and the hand pulse harness to the plug receptors on the back side of the console, taking care to install correctly (See plug alignment marks).
2. Carefully feed the slack in the wires into the Console Mast and place the Console on the mounting plate
3. Fasten the console to the console mounting plate with four M5 x 10mm screws using a Phillips screwdriver.

Note: Console may be operated using batteries or the AC Adapter that came with the unit. If it is going to be operated using batteries the AC Adapter MUST be unplug from the unit.

Handrail Assembly
1. Slide one Handrail onto its post on the top of the Frame. If the Handrail is on the correct side, the bolt holes at the bottom of the bar will line up with those on the post and the Handlebar will arc forward from the frame.
2. Attach the Handrail on the post using three M8 x 15mm bolt and three 8.5mm arc (bent) washers.
3. Install the handrail cover onto the half that is already on the frame using two M4 x 12mm screws.
4. Repeat the above two step to attach the other Handrail to the Frame.

Good health is an exercise in common sense.

The Surgeon General released a new study in 2001, The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity. It indicates that 61% of American adults are either overweight or obese. The story states that overweight increases the risk of health problems, such as heart disease, certain types of cancer, type 2 diabetes, etc. It further points out that overweight needs to be regarded primarily as a Health rather than as an Appearance issue.

The Surgeon General's Healthy weight advice for consumers is:
1. Aim for a healthy weight: Find your Body Mass Index (BMI) on the chart below.
2. Be active: Keep physically active to balance the calories you consume.
3. Eat well: Select sensible portion sizes.

BMI = (weight (lb) ÷ height² (in)) x 703

$$BMI = (weight\ (lb) \div height^2\ (in)) \times 703$$

Weight in Pounds

Height	120	130	140	150	160	170	180	190	200	210	220	230	240	250
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

Height in Feet and Inches

Healthy Weight   Overweight   Obese

Note: This chart is for adults (aged 20 years and older).

Heart rate is an important key to your exercise.
The Surgeon General also 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 cardio respiratory 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 exces-

Diamondback fitness

sive 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 460 model unit is designed to include heart rate monitoring 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 460 model unit is equipped with a wireless telemetry receiving system. What it does is automatically count your heart rate while you are wearing a heart rate chest belt during your exercising period. Heart rate is monitored and electronically displayed as a digital read-out. 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 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 for a 35-year –old person:

|	
220 – Age = Maximum Heart Rate	(220 – 35 = 185)
60% of Maximum Heart Rate	(60% x 185 = 111bpm)
85% of Maximum Heart Rate	(85% x 185 = 157bpm)
Training Zone:	111bpm – 157bpm

Quantity & Quality

It is recommended that you accumulate at least 30 minutes of physical activity most days of the week. Physical activity should be initiated slowly and the intensity should be increased gradually. You should select activities that you enjoy and can fit into your daily life. Having Diamondback equipment at home certainly gives you the comfortable and convenient workout you want.

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 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 per week to your program.

**Heart Rate Guidelines
60% - 85% Maximum Target**

Ages in years

▲ = 85% ■ = 60%
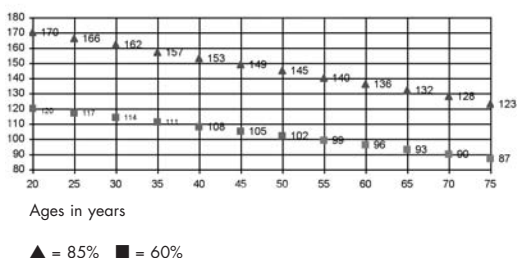
**Typical Target Zone Exercise
Patterns for 35 year-old**
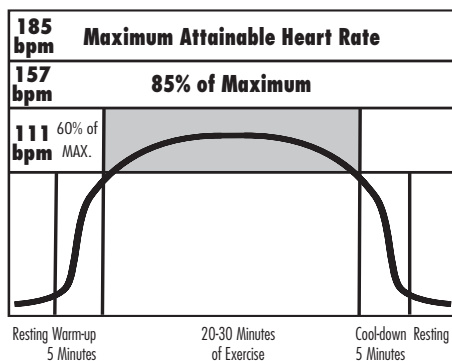
Workout guidelines (continued)

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 beginning any type of exercise program. People who have diabetes or high blood pressure, a family history of heart disease, high cholesterol or have lead a sedentary lifestyle should protect themselves with a medical check-up and a stress test, preferably administered during exercise by a health-care professional.

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

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Pulse Hand Grips (Standard)

The 460 Model units have heart rate feedback and come standard with stainless steel pulse hand grips. To activate, gently grasp both hand grips to obtain a heart rate reading.

(Note: It is recommended to wear a chest strap for Heart Rate control program as it is more accurate. If you wear a chest strap and use hand grips at the same time for heart rate monitoring, the console will take the measurement of the chest strap.)

Pulse Grip 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 460 Model units are also equipped with a built-in receiver for your heart rate monitoring. To utilize this receiver you will need to wear a heart rate monitoring chest strap which is Polar® compatible. 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 who are using a heart rate monitoring device.

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

The receiver of the wireless ECG system is built into the console of the Diamondback 460 equipment. When using any heart rate control program, the computer monitors and attempts to control your heart rate to the desired level. Heart rate frequency is displayed while the computer continually compares heart rate to the preprogrammed personal data. 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.

(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.)

GENERAL INFORMATION

Glossary of Terms

- *Idle mode* – Console has reset and is waiting for an entry. The dot matrix displays "DB". If the there is no RPM for 5 minutes, the console will power down.

- *LED* — The lights on the face of the console.

- *Watts* —The amount of power generated by the 460 unit's braking system during a workout.

- *Work*— The amount of energy expended during exercise.

- *Resistance Level* — The resistance setting of the brake. The resistance increases as the level goes up.
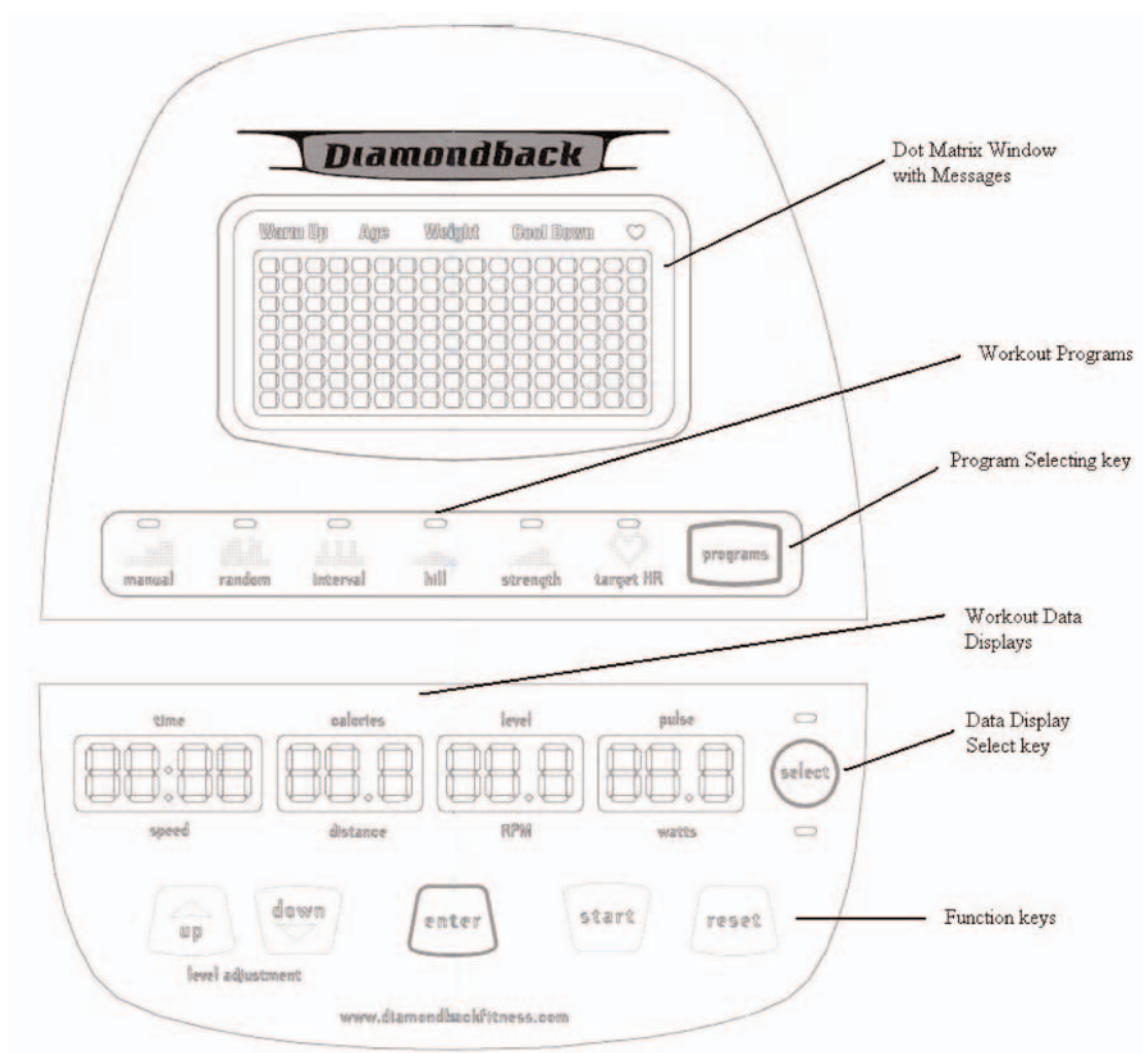
Default Values

- *Age* – 35 years
- *Weight* – 155 lb (70 kg in Metric setting)
- *Program time* – 30 minutes; Segment time – 2 minutes
- *Resistance Level* – Level 1

Note: The default values for Age, Weight and Time will update each time they are changed in the program settings.

Dot Matrix Window with Messages

Workout Programs

Program Selecting key

Workout Data Displays

Data Display Select key

Function keys

Console Layout and Controls (continued)

Dot Matrix /Profile display

1. During the program setup this display will light up the "Age" or "Weight" message when these values are requested. The value that is being entered will be displayed in the dot matrix.
2. The "Warm Up" and "Cool Down" messages will light up to indicate these modes.
3. The dot matrix will display "EN" for English units or "ME"for metric units when the units are adjusted.
4. The dot matrix displays the exercise profile during the program.
    *   Each horizontal row represents 2 resistance Levels. So, the bottom row represents Levels 1 and 2, while the top row represents Levels 15 and 16.
    *   For the Target Heart Rate program, horizontal rows represent % Max. heart rate rather than resistance level.
    *   Each vertical column represents a time interval determined by the length of the program

Workout data display

As soon as a program begins, these displays will show the default workout data: time, calories, level and pulse. You may change the data being displayed by pressing the "SELECT" key to the right of the displays. The LED indicators will light up to show which row of data is current being displayed.

The data that can be displayed are:
*   Time (hr:min or min:sec): The time remaining in the current program. When the "Warm Up" or "Cool Down" message is displayed, this time refers to the time left in that section of the program.
*   Calories (kcal): Total workout calories
*   Level (Level 1 through 16): Current resistance level.
*   Pulse (BPM): This measures your heart rate in Beats Per Minute.
*   Speed (mi/hr or km/h): Current traveling speed as if moving.
*   Distance (mile or km): Total distance traveled as if moving.
*   RPM: Revolutions per Minute of your feet.
*   Watts: Current workout watts.

Program Select Key

This key scrolls through the different workout programs of the 460. Each time the key is pressed, the console advances to the next program selection.

Function Keys

Level Up/Down keys:
Used for data entry during program setup and resistance/heart rate level adjustment while a program is running.
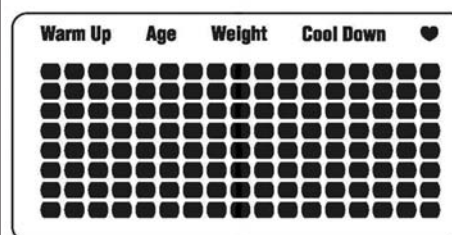
Enter key:
Used to confirm data entry.

Start key:
Starts the selected program.

Reset key:
Causes the current program to enter cool-down mode immediately. If this key is pressed and held for two seconds, the current program will reset.

Dot Matrix/Profile display

Workout data display

Program Select key

Function keys

- **Power On:**
  When the console is powered down, press any key or begin pedaling to wake the console

- **Start a Program:**
  To begin a workout program, press the Program Select Key to select the desired program. Then, press the "Enter" key to enter your personal data, or press the "Start" key to bypass entering user data and start the workout using default values for age, weight, and time.

- **Stop:**
  To stop a program before it is complete, press the "Reset" key once. The unit will immediately enter "Cool Down" mode.

- **Reset:**
  To reset the console at any time, press and hold the "RESET" key for 2 seconds. When the console is reset it will return to Idle mode.

- **Pause and Resume:**
  You may interrupt or pause a program during a workout. To pause a program, simply stop pedaling. To resume the program operation, begin pedaling once again.

- **Re-start Program:**
  To re-start an exercise program from the Cool Down or Workout Summary modes, press the "START" key. The exercise program will begin again.

- **Level Adjustment:**
  During any program except the Target Heart Rate program, you may adjust the resistance level at any time. Simply press the Level Adjustment "UP" or "DOWN" key. The Level data display will show the current resistance level and adjust it accordingly. The dot matrix display will also update the profile to show the new resistance level.

- **Target Heart Rate Adjustment:**
  During the Target Heart Rate program pressing the "UP" or "DOWN" key will adjust your Target Heart Rate setting for the program by 1 BPM each time the key is pressed.

- **English/ Metric Unit setting:**
  The default Unit setting is the English system. To enter the system switching mode, press and hold the "START" and "PROGRAM" keys for 2 seconds, during the Idle mode. The dot matrix display will show "EN" for English units or "ME" for Metric units. To change the setting, press the "UP" or "DOWN" key. After choosing the desired units press the "RESET" key to return to idle mode.

W A R M   U P

Getting Started

The console will automatically start each program with a 3-minute Warm Up section. This section is designed to prepare your body for an intensive workout and to reduce the possibility of injury during exercise.

Note: Warm Up is skipped in the Quick Start and Manual programs.

Beginning the Program

The Warm Up begins as soon as the "START" key is press and a program is executed. The dot matrix window will light up the "Warm Up" message and display the program profile. The Warm Up section will be displayed in the first column of the dot matrix.

During the Program

Data Display
* Once the Warm Up begins, the data display window will display the default workout data of Time, Calories, Level and Pulse. Press the "SELECT" button to change the data display.
* The time will count down from 3:00.
* The pulse display will display the heart rate if a valid pulse signal is detected.

Adjustment
* The resistance will begin at Level 1; during the Warm Up it can be adjusted between Levels 1 through 5 only.
* To skip the Warm Up section and start the program, press the "START" key at any time.

Ending the Program

* When 3 minutes have elapsed, or the "START" key is pressed, the Warm Up will end and the exercise program will begin.

C O O L   D O W N

Getting Started

The console will initiate a 3-minute Cool Down section at the end of each program. This section begins as soon as a program ends. Cool Down is designed to reduce muscle stiffness and allow your heart rate to recover from the workout.

Beginning the Program

The Cool Down will be active as soon as the program ends. The dot matrix window will light the "Cool Down" message. The program profile will be displayed in the matrix, with the Cool Down shown in the last column.

During the Program

Data Display
* The data display windows will continue to track and display the workout data from the exercise program. Press the "SELECT" button to change the data

display as desired.
- The time will count down from 3:00.
- The pulse display will display the heart rate if a valid pulse signal is detected.

Adjustment
- The resistance will begin at Level 1; during the Cool Down it can be adjusted between Levels 1 through 5 only.
- To skip the Cool Down section and re-start the program, press the "START" key at any time.
- To end the workout and reset the console, press and hold the "RESET" button.

Ending the Program
When 3 minutes have elapsed, the Cool Down will end and the console will go to the workout summary.

W O R K O U T   S U M M A R Y

Getting Started
After the exercise program and Cool Down have ended, the console will display the final workout data before resetting. When the Cool Down ends, the Summary data will display.

During the Program

Data Display
- During the summary the following data will be available for display:
  o   Workout Program time
  o   Total Calories
  o   Total Distance

Adjustment
- The resistance can not be adjusted during this summary.

Ending the Program
To end the workout summary you may press and hold the "RESET" key to reset the console or press the "START" key to re-start the program.

P R O G R A M S

MANUAL PROGRAM

Getting Started
The Manual program allows you to build your own exercise profile. You should be sure to include a Warm Up and Cool Down period during your workout since these modes are skipped in the Manual program.

Beginning the Program
During the idle mode, the dot matrix window displays "DB". To begin this program, press the "PROGRAMS" key until the "Manual" program LED indicator is lit..

Accepting Default values or Entering the program setting mode
When the "Manual" LED indicator is lit, it indicates you are about to select the Manual program:
- Press the "START" key to begin the Manual program workout with the current default values.
   - o Default time = 30 minutes
   - o Default Level = Level 1
- Or you may press the "ENTER" key to start the program setup mode. The dot matrix and data displays will take you through the program setup mode step by step as shown below. (To skip the setup and begin the workout immediately, press the "START" button at any time.)

Entering Age
1. Once the "ENTER" key is pressed, the dot matrix will light the "Age" message.
2. The default Age will display in the dot matrix.
3. Press the Level "UP" or "DOWN" key to adjust the age.
4. Once the age is correct, press "ENTER" to accept and enter Weight Adjustment.

Entering Weight
1. The dot matrix will light the "Weight" message.
2. The default Weight will display in the dot matrix.
3. Press the Level "UP" or "DOWN" key to adjust the Weight.
4. Once the Weight is correct, press "ENTER" key to accept and enter Time Adjustment.

Entering Time
1. The default program Time will display in the Time data display window.
2. Press the Level "UP" or "DOWN" key to adjust the program Time.
3. Once the Time is set, press "ENTER" or "START" key to accept and begin this program.

During the Program
As soon as the "Enter" or "Start" key is pressed, the Manual program will start.

Display
- Once the program begins, the data display window will display the default workout data of Time, Calories, Level and Pulse. Press the "SELECT" button to change the data display.
- The time will count down from the selected program Time.
- The pulse display will display the heart rate if a valid pulse signal is detected.

Adjustment
- Press the level "UP" or "DOWN" key to adjust the resistance level from Level 1 through 16. The level data display and the dot matrix window will update to show the level setting

Ending the Program
- When the selected program time is up or the "RESET" key is pressed, this program will end and the Cool Down Mode will begin. See Cool Down section for details.

Pause, Reset, Switch, Stop or Save the program
See Basic Operation section for details.

RANDOM PROGRAM

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

Beginning the Program
During the idle mode, the dot matrix window displays "DB". To begin this program, press the "PROGRAMS" key until the "Random" program LED indicator is lit.

Accepting Default values or Entering the program setting mode
When the "Random" LED indicator is lit, it shows you are about to select the Random program:
  • Press the "START" key to begin the Random program workout with the current default values.
    o Default time = 30 minutes
    o Default Level = a computer generated level profile
  • Or you may press the "ENTER" key to start the program setup mode. The dot matrix and data displays will take you through the program setup mode step by step. Entering Age, Weight and Time is done the same as in the Manual program setup.

During the Program
As soon as the "Enter" or "Start" key is pressed, the Random program will start.

  Data Display
  • Once the program begins, the data display window will display the default workout data of Time, Calories, Level and Pulse. Press the "SELECT" button to change the data display.
  • The time will count down from the selected program Time.
  • The pulse display will display the heart rate if a valid pulse signal is detected.

  Adjustment
  • Press the level "UP" or "DOWN" key to adjust the resistance level from Level 1 through 16. The current segment and all remaining segments will adjust to the new resistance setting and the dot matrix will update the profile accordingly.

Ending the Program
  • When the selected program time is up or the "RESET" key is pressed, this program will end and the Cool Down Mode will begin. See Cool Down section for details.

Pause, Reset, or Restart the program
See Basic Operation section for details.

INTERVAL

Getting Started
The Interval program is designed to build the strength of your cardiovascular system by alternating the workload from high to low. This gives your heart a very effective workout.

Beginning the Program
During the idle mode, the dot matrix window displays "DB". To begin this program, press the "PROGRAMS" key until the "Interval" program LED indicator is lit.

Accepting Default values or Entering the program setting mode
When the "Interval" LED indicator is lit, it indicates you are about to select the Interval program:
- Press the "START" key to begin the Interval program workout with the current default values.
  - o   Default time = 30 minutes
  - o   Default Level = the default profile alternates Rest (Level 2) and Work (Level 10) segments.
- Or you may press the "ENTER" key to start the program setup mode. The dot matrix and data displays will take you through the program setup mode step by step. Entering Age, Weight and Time is done the same as in the Manual program setup.

During the Program
As soon as the "Enter" or "Start" key is pressed, the Interval program will start.

Data Display
- Once the program begins, the data display window will display the default workout data of Time, Calories, Level and Pulse. Press the "SELECT" button to change the data display.
- The time will count down from the selected program Time.
- The pulse display will display the heart rate if a valid pulse signal is detected.

Adjustment
- During the Rest segment, press the level "UP" or "DOWN" key to adjust the resistance up to 2 levels below the current Work setting or down to level 1. The remaining Rest segments will be updated to the new setting in the dot matrix profile.
- During the Work segment, press the level "UP" or "DOWN" key to adjust the resistance down to 2 levels above the current rest setting and up to Level 16. The remaining Work segments will be updated to the new setting in the dot matrix profile.

Ending the Program
- When the selected program time is up or the "RESET" key is pressed, this program will end and the Cool Down Mode will begin. See Cool Down section for details.

Pause, Reset, or Restart the program
See Basic Operation section for details.

HILL

Getting Started
The Hill program simulates a hill climbing exercise with a preset hill profile. The exercise profile will guide you up over a hill and down the other side.

Beginning the Program
During the idle mode, the dot matrix window displays "DB". To begin this program, press the "PROGRAMS" key until the "Hill" program LED indicator is lit.

Accepting Default values or Entering the program setting mode
When the "Hill" LED indicator is lit, it indicates you are about to select the Hill program:
- Press the "START" key to begin the Hill program workout with the current default values.
  o Default time = 30 minutes
  o Default Level = preset level as shown in dot matrix profile
- Or you may press the "ENTER" key to start the program setup mode. The dot matrix and data displays will take you through the program setup mode step by step. Entering Age, Weight and Time is done the same as in the Manual program setup.

During the Program
As soon as the "Enter" or "Start" key is pressed, the Hill program will start.

Data Display
- Once the program begins, the data display window will display the default workout data of Time, Calories, Level and Pulse. Press the "SELECT" button to change the data display.
- The time will count down from the selected program Time.
- The pulse display will display the heart rate if a valid pulse signal is detected.

Adjustment
- Press the level "UP" or "DOWN" key to adjust the resistance level from Level 1 through 16. The current time segment and all remaining time segments will adjust to the new resistance setting and the dot matrix will update the profile accordingly.

Ending the Program
- When the selected program time is up or the "RESET" key is pressed, this program will end and the Cool Down Mode will begin. See Cool Down section for details.

Pause, Reset, or Restart the program
See Basic Operation section for details.

Workout Programs (continued)

STRENGTH

Getting Started
TThe Strength program increases the workload as the workout progresses. This program is focused on strengthening your heart and your major muscle groups

Beginning the Program
During the idle mode, the dot matrix window displays "DB". To begin this program, press the "PROGRAMS" key until the "Strength" program LED indicator is lit.

Accepting Default values or Entering the program setting mode
When the "Strength" LED indicator is lit, it indicates you are about to select the Strength program:
- Press the "START" key to begin the Strength program workout with the current default values.
  o Default time = 30 minutes
  o Default Level = preset level as shown in dot matrix profile
- Or you may press the "ENTER" key to start the program setup mode. The dot matrix and data displays will take you through the program setup mode step by step. Entering Age, Weight and Time is done the same as in the Manual program setup.

During the Program
As soon as the "Enter" or "Start" key is pressed, the Stength program will start.

Data Display
- Once the program begins, the data display window will display the default workout data of Time, Calories, Level and Pulse. Press the "SELECT" button to change the data display.
- The time will count down from the selected program Time.
- The pulse display will display the heart rate if a valid pulse signal is detected.

Adjustment
- Press the level "UP" or "DOWN" key to adjust the resistance level from Level 1 through 16. The current time segment and all remaining time segments will adjust to the new resistance setting and the dot matrix will update the profile accordingly.

Ending the Program
- When the selected program time is up or the "RESET" key is pressed, this program will end and the Cool Down Mode will begin. See Cool Down section for details.

Pause, Reset, or Restart the program
See Basic Operation section for details.

TARGET HEART RATE

Getting Started
The Target Heart Rate program is designed to keep your training at your chosen heart rate level. The console computer will adjust the resistance level automatically to ensure that you reach and maintain the heart rate goal you have set.

A HEART RATE MONITORING DEVICE (HAND GRIPS, CHEST STRAP) MUST BE USED FOR THIS PROGRAM TO FUNCTION PROPERLY. FOR BEST RESULTS, USING A CHEST STRAP IS RECOMMENDED.

IMPORTANT: It is dangerous to exceed 95% of your maximum heart rate while you are exercising. Please consult your physician before performing any Heart Rate based training program.

Beginning the Program
During the idle mode, the dot matrix window displays "DB". To begin this program, press the "PROGRAMS" key until the "Target HR" program LED indicator is lit.

Accepting Default values or Entering the program setting mode
When the "Target HR" LED indicator is lit, it indicates you are about to select the Target Heart Rate program:
- Press the "START" key to begin the Target Heart Rate program workout with the current default values.
  - o   Default time = 30 minutes
  - o   Default Target HR = 120 BPM
- Or you may press the "ENTER" key to start the program setup mode. The dot matrix and data displays will take you through the program setup mode step by step. Entering Age, Weight and Time is done the same as in the Manual program setup. After you have entered these settings you will need to set your Target HR as shown below.

Entering Target HR setting
1. The Pulse data window will display the default target HR.
2. Press the Level "UP" or "DOWN" key to adjust the target HR setting.
3. After HR adjustment, press "ENTER" or "START" to accept and begin this program

During the Program
As soon as the "ENTER" or "START" key is pressed, the Target Heart Rate program will start.

Dot Matrix Display
- The Dot Matrix Display will show your actual heart rate vs. target heart rate for this program, rather than the resistance level.

Data Display
- Once the program begins, the data display window will display the default workout data of Time, Calories, Level and Pulse. Press the "SELECT" button to change the data display.
- The time will count down from the selected program Time.
- The pulse display will display the heart rate if a valid pulse signal is detected.

Adjustment
- Press the level "UP" or "DOWN" key to adjust the Target HR setting during the workout. The Pulse data window will show the updated target HR setting until the adjustment is finished, then it will return to displaying the actual HR reading.

Ending the Program
- When the selected program time is up or the "RESET" key is pressed, this program will end and the Cool Down Mode will begin. See Cool Down section for details.

Pause, Reset, or Restart the program
See Basic Operation section for details.

Diamondback
f i t n e s s

(Applies to all product sold and placed within the continental US, Alaska, Hawaii, and Puerto Rico only)

Effective: June 2006
Diamondback warrants its 460Ub Upright, 460Rb Recumbent, and 460 Elliptical to be free from defects in material and workmanship under normal use in the home and light instructional environments. Diamondback's obligation under this Warranty is limited to repair or replacement of any defective part without charge through an authorized service agent to the original purchaser with 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.

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 in order to determine Warranty claims/issues.

Sales where the unit is delivered unassembled (in a carton) to the end user (e.g. mail order or Internet sales) without a service contract purchased through the dealer voids the Warranty.

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. Registration is available at www.diamondbackfitness.com.

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

WHAT IS COVERED

Frame:	Lifetime limited Warranty, covers defects in welds, materials, and workmanship.
Parts & Electronics:	2 years for parts
Normal Wear Items:	90-days
Labor:	1 Year

Warranty voided if:
The Warranty does not apply to any failure of the product, or any parts of the product, due to: assembly errors, alterations, modifications, misuse, abuse, accident, improper maintenance, or if the serial number on the product has been removed, altered or defaced. Assembly errors include but are not limited to:

Damaged wire harness.
Stripped crank arms and/or pedals.
Bolts used in the wrong location.

Parts & Service:
Contact the authorized Diamondback dealer where unit as originally purchased. If you have moved, or that retailer is unavailable, use our dealer locator at www.diamondbackfitness.com to help find another authorized dealer.

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

Exclusions:
Warranty is void if the 460 model unit is placed in a commercial or light commercial environment, such as health club, school, or correctional facility.

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, are limited to the same duration as the express Warranty herein. Diamondback Fitness, Inc. 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, Inc. 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.

Diamondback Fitness, Inc
300 Camarillo Ranch Road
Camarillo, CA 93012

800-776-7642

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 Fitness' 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 the warranty.

After training, always wipe down your 460 model unit. Perspiration that continuously settles on frame, pads or casing may eventually cause rust 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 a clean towel.

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

NOTES

WARRANTY CARD

WARRANTY CARD

Diamondback fitness

Important! • Important! • 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. Or, you may register your product at www.diamondbackfitness.com.

Your Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Daytime phone No.: _____ Evening phone No.: _____

Dealer Store Name: _____ Address: _____

City: _____ State: _____ Zip: _____

Model: _____ Serial No.: _____

Purchase Date: _____

Environment Unit Placed:
❏ Home   ❏ Light Institutional, i.e. Hotel, Business Center…

Mail completed form to:

Diamondback Fitness - Warranty Card

300 Camarillo Ranch Road

Camarillo, CA 93012

www.diamondbackfitness.com

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F 805-388-5890

well equipped for success

Part no. 22-96-903