# **Owner's Manual**





# **Table of Contents**

IMPORTANT SAFETY INSTRUCTIONS
WOODWAY HISTORY
THINGS TO CONSIDER
PRODUCT SPECIFICATIONS 11
BLADE SAFETY FEATURES 15
INSTALLATION 18
SKATEMILL FUNDAMENTALS
PERSONAL TRAINER DISPLAY
HOW TO USE THE BLADE AND ITS SAFTEY FEATURES
SKATEMILL MAINTENANCE
TROUBLESHOOTING 53
WARRANTY INFORMATION

# **Important Safety Instructions**

# CAREFULLY READ AND UNDERSTAND ALL SAFETY WARNINGS BEFORE OPERATING THE BLADE SKATEMILL

When using any piece of fitness equipment, basic precautions need to be followed. Read, understand, and carefully follow this manual to familiarize yourself with all warnings, instructions, and procedures concerning proper care and maintenance of a WOODWAY BLADE Skatemill.

Instructions are found in this Owner's Manual and some will also appear on labels and instructions on the skatemill itself.

#### **DANGER –** To reduce the risk of electrical shock:

- Do not modify the plug provided with the skatemill. It is equipped with a grounding plug. If it does not fit in the outlet, have a proper outlet installed by a qualified electrician.
- Do not use any adapters, especially ones without grounding provisions. To do so could result in electrical shock.
- Do not operate electrically powered skatemills in damp or wet locations.
- Do not operate the heart rate monitor transmitter in conjunction with an electrical heart pacemaker. The transmitter may cause electrical disturbances.
- Always unplug the skatemill before cleaning or servicing.
- Do not soak the skatemill surfaces with any liquid; use the recommend sprayer to apply surface lubricant and/or a damp cloth to clean the surface.

- Keep all electric components, such as the motor, power cord, and power switch away from water.
- Do not attempt to service your skatemill yourself if you feel at risk.
- Do not place any liquids (other than lubricant) on the skatemill surface.
- Always keep the surface clean and free of debris.

#### CAUTION

- Consult with your physician before beginning any exercise program, especially if you have any of the following: history of heart disease, high blood pressure, diabetes, chronic respiratory disease, elevated cholesterol, smoke cigarettes, or experience any other chronic disease or physical impairments.
- Pregnant women should consult their physician before beginning an exercise program.
- Allow several minutes to bring your heart rate into the training zone shown on page 10. Walk or skate slowly after your workout to allow your body time to cool down and your pulse rate to decrease.

#### WARNING - To reduce the risk of injury to you and others

- Set up and operate skatemill on a solid, level surface.
- Keep all loose clothing and towels away from the skatemill skating surface.
- Never leave children unsupervised around a skatemill.
- Inspect the skatemill for worn or loose components prior to use.
- Tighten/replace any worn or loose components prior to use.
- Read, understand and test the emergency stop procedures.
- Always wear protective clothing from the waist down



**Red Emergency Stop Button** 

- ALWAYS KEEP THE EMERGENCY STOP BUTTON IN CLOSE PROXIMITY OF THE OPERATOR! The operator is responsible for controlling the stop button at all times.
- WOODWAY skatemills are built to handle a single skater weighing up to 800 pounds. Never skate double on the BLADE, only one person on the machine while in operation.
- The safety and integrity designed into the machine can only be maintained when the skatemill is regularly examined for damage and repaired. It is the sole responsibility of the user/owner or facility operator to ensure that regular maintenance is performed. Worn or damaged components shall be replaced immediately or the skatemill removed from service until the repair is made. Only manufacturer supplied or approved components shall be used to maintain and repair the skatemill.



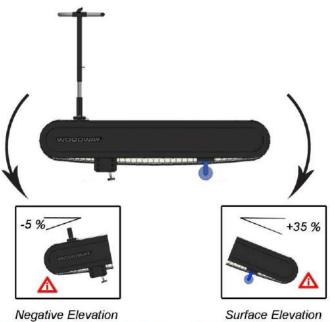
ALWAYS USE THE HANDLEBAR/HANDRAIL WHEN MOUNTING AND DISMOUNTING THE SKATEMILL.



#### ALWAYS USE/WEAR THE SUPPIED SAFETY HARNESS.

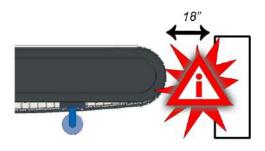
#### ALWAYS BE SURE TO CONNECT THE SKATER TO THE GANTRY USING ONLY SUPPLIED EQUIPMENT. YOU MUST ATTACH SAFTEY ROPE TO LARGE RING AND ADJUST THE LENGTH OF THE SAFTEY ROPE TO MATCH THE SKATERS HEIGHT.

#### BE AWARE OF POTENTIAL DANGEROUS AREAS AT THE FRONT AND REAR OF SKATEMILL



Negative Elevation \*\* Front of tread will angle down, decreasing the space between the bottom of tread and floor

Surface Elevation \*\* Back of tread will angle down, decreasing the space between the bottom of tread and floor



\*\* Never walk or reach a hand or foot near the back of the BLADE when it is in operation.

\*\* Always unplug the machine before attempting to clean or remove items that may be near skating surface.

\*\* Leave at least 18" of free space between the machine and the platform in a pit install.

#### KEEP HANDS AND FEET CLEAR OF MOVING PARTS

 If your BLADE does not utilize a pit, keep all furniture and objects at least 4 feet from the machine.

# **WOODWAY History**

WOODWAY's history began in Germany in 1974. Willi Schoenberger, a technical director in charge of planning a fitness center, noticed that the most important piece of equipment, the treadmill, did not meet the most important requirements: a mechanically sound machine that is designed to meet human needs.

He envisioned a comfortable surface that did not interfere with the natural biomechanics of running or walking. Also, he wanted to design a transportation system which eliminated the friction associated with the conventional (conveyor belt) treadmills. After intensive research, and trial and error (and in cooperation with the Deutsche Sporthochschule in Koln, Germany), Willi developed and patented a very unique and revolutionary treadmill design.

In 1975, WOODWAY GmbH was founded in Weil am Rhein, Germany. The name "WOODWAY" is derived from the German "Waldweg" (Wald = Wood and Weg = Way) – the feel of running on a soft pine needle covered path in the forest.

In 1983, a manufacturing license was awarded to Sakai Medical, for the use of WOODWAY technology in the Japanese marketplace.

In 1988, a U.S. license was granted to a small, but well-established manufacturing company in Waukesha, Wisconsin. WOODWAY USA was formed when the U.S. incarnation of the WOODWAY was developed and completed in 1990. WOODWAY USA is very proud to be the primary manufacturer of WOODWAY Treadmills worldwide, exporting treadmills each month to Germany and Japan for international distribution, in addition to serving our domestic customers and clients.

Today, WOODWAY's design and manufacturing facilities in the United States, Germany and Japan make WOODWAY the largest specialized treadmill manufacturer in the world. Constant enhancements in quality, design and function are shared and implemented by all three WOODWAY manufacturers.

# Things to Consider Before Starting an Exercise Program

# CONSULT A PROFESSIONAL FITNESS TRAINER

It is advisable for all exercise beginners to consult a professional fitness instructor or personal trainer to develop an overall fitness evaluation/wellness program before starting an exercise routine.

## **CONSULT A PHYSICIAN**

If you are over 40, have a history of heart disease, are overweight, or have not been involved in any kind of exercise program for several years, it is recommended that you see your physician as a precaution before engaging in a vigorous exercise program.

### UNDERSTAND THE IMPORTANCE OF WARMING UP AND COOLING DOWN

It is important to warm up and cool down prior to and at the end of each work out, respectively. Always try to incorporate a series of basic leg stretches before and after each workout. Stretching provides the necessary flexibility to prevent sore muscles and injury during daily activities.

### LEARN HOW TO TAKE YOUR PULSE PROPERLY

To select the Fitness Level that is most suitable to exercise, it is important to correctly determine your heart rate or pulse. To do this, it is recommended that you use a good quality heart rate monitor. If you do not have a heart rate monitor, you can find your pulse by placing your fingers on the underside of your wrist or either side of your throat. While looking at the second hand on your watch, count how many heartbeats you feel within fifteen (15) seconds. Multiply this number by four to get your Beats Per Minute (BPM). Your heart rate will be needed when you take the Self-Fitness Test.

### KNOW YOUR MAXIMUM HEART RATE

To determine your maximum heart rate, subtract your age from 220 (general formula). The difference is the approximation of your maximum heart rate, as used by the

American Heart Association and The American College of Sports Medicine. The only way to determine your true maximum heart rate is to have a stress test administered by your physician. The American Heart Association recommends that you have a stress test done if you have any history of heart disease or if you are over the age of 40 and beginning an exercise program.

During exercise, it is recommended that you not exceed 85% of your maximum heart rate. Our programs are designed to keep your heart rate within your Target Zone. Your Target Zone is an area between 60 and 75% of your maximum heart rate. Should you find your heart rate above the 75% level, you have probably selected a Fitness Level that is too high in that particular Fitness Program. You should either drop to a lower intensity level in the same Fitness Program, or use a less stressful Fitness Program.

## STAY ACTIVE

Between workouts it is suggested that you simply stay active, eat well-balanced meals, and drink plenty of water. The combination of these should enhance your chances for a future of good health.

AGE	MAXIMUM HEARTRATE	60% OF MAXIMUM HEART RATE	75% OF MAXIMUM HEART RATE	85% OF MAXIMUM HEART RATE
20	200 BPM*	120 BPM	150 BPM	170 BPM
25	195	120	150	160
30	190	110	140	160
35	185	110	130	150
40	180	100	130	150
45	175	100	130	140
50	170	100	120	140
55	165	90	120	130
60	160	90	120	130
65	155	90	110	130
70	150	90	110	120
75	145	80	100	120
+0014 0	Beats Per Minute			

# **Product Specifications**

# PHYSICAL SPECIFICATIONS

Belt Type	87 individual slats
Drive System	316 ABEC 1 rated ball bearings with 32 guide bearings (4 mm lateral tolerance)
Skating Surface	Polyethylene
Drive Motor	5 hp continuous (15 hp peak) brushless servo
Unit Weight	3,000 lb. (shipping weight 3,500)
Power Supply	220 V AC single Phase with L6-30 NEMA Plug, requires dedicated 30 A circuit (6kVA input)

### PHYSICAL DIMENSIONS



#### PERFORMANCE SPECIFICATIONS

Skating Surface Area	83" L X 94" W
Speed Range	0 - 20 mph, zero start 0-5 mph reverse, zero start 0.1 mph increments
Elevation Range	(-5%) - (+35%)
Warranty	5 year motor 3 year parts (excluding skating surface) 1 year labor

#### **ELECTRICAL SPECIFICATIONS/POWER REQUIREMENTS**

208 V AC	Single Phase 30 Amp, 50/60 Hertz (dedicated circuit) * Requires at least 208 volts. If less than 208 volts the skatemill will shut down due to improper voltage. Once the skatemill pulls voltage below
	the 10% minimum of 208 volts, skatemill will shut off and reset.
220 V AC	Single Phase 30 Amp 50/60 Hertz (dedicated circuit)
	* Requires at least 220 volts coming out of the wall outlet. If less than 220 volts the skatemill will shut down due to improper voltage. Once the skatemill pulls voltage below the 10% minimum of 220 volts, skatemills will shut off and reset.
Outlet Requirements	NEMA L6-30 R outlet. (twist lock, 208-220 V AC) 30 Amp (dedicated circuit required)
Treadmill Power Cord	15' cord with NEMA L6-30P plug on end Main Fuse 30 Amp Circuit Breaker

## \*\*A DEDICATED CIRCUIT WHICH DOES NOT SHARE A NEUTRAL IS REQUIRED!

# CAUTION – ANY ALTERATIONS TO THE PLUG CONFIGURATION MAY VOID YOUR WARRANTY

#### **ENVIRONMENATAL SPECIFICATIONS**

Degree of Protection

IP42

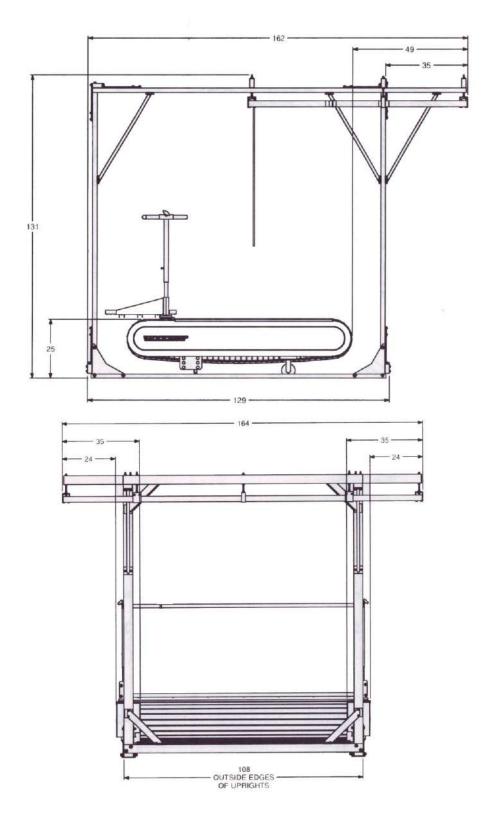
#### **OPERATING CONDITIONS**

Ambient Temperature: Relative Humidity: +10°C to +40°C (<u>50</u>°F to +104°F) 20 to 95%

#### **RANSPORTATION & SORAGE CONDITIONS**

Temperature Range: Relative Humidity: Atmospheric Pressure Range -18°C to +49°C (0°F to +120°F) 20 to 95% 700hPa to 1060 hPa (20.67 to 31.3 inches of Mercury

# **GANTRY DIMENSIONS (in inches)**



# **BLADE Safety Features**

CAREFULLY READ AND UNDERSTAND THE BUILT IN SAFETY FEATURES OF YOUR BLADE SKATEMILL

NEVER OPERATE THE SKATEMILL WITHOUT THE SUPERVISION OF A TRAINER

#### ALWAYS WEAR THE SUPPLIED SAFTEY HARNESS, THE HARNESS MUST BE SECURED TO AN APPROVED SAFTEY GANTRY WITH SUPPLIED EQUIPMENT

### EMERGRENCY STOP SWITCH AND SAFETY LANYARD

The emergency stop switch and safety lanyard are designed for quick and easy stopping of the BLADE skating surface. In the event of an emergency or danger, quickly press the remote stop button or pull the lanyard to disengage the drive belt and bring the skating surface to a quick stop.



**Red Emergency Stop Button** 

The individual operating the machine (speed, incline) is responsible for the safety of those skating. Always maintain direct eye contact with BLADE users, paying particular attention to the skaters when mounting and dismounting the machine.

Always keep remote stop switch within easy access of the operator and clip the safety lanyard firmly to the clothing of the operator.



The magnetic lanyard must be placed squarely on the red square marked "EMERGENY STOP" for the machine to function. If it is not positioned properly, the belt will be disabled and will therefore not spin or move. This is similar to cutting the electricity to the machine.

### CAUTION: ALWAYS USE THE EMERGENCY STOP SWITCH WITH THE LANYARD!

#### SAFTEY HARNESS

WOODWAY provides four safety harnesses for all BLADE owners. Safety harnesses must be worn correctly to prevent injury. Each Harness is sent with particular instructions detailing proper fitting.

### Safety harnesses must be worn by BLADE skatemill users at all times!

#### ALWAYS CONSULT HARNESS INSTRUCTION SHEET SUPPLIED IN HARNESS PACKAGING FOR PROPER FIT



The chest strap must be worn tightly at all times. The locking mechanism can/may open if worn loosely

NOTE: NEVER ALTER THE HARNESS IN ANY WAY

NOTE: INSPECT THE HARNESS BEFORE USE AND DO NOT USE IF THE HARNESS IS TORN OR FRAYED IN ANYWAY

### HARNESS TO GANTRY CONNECTION

The length of the safety rope must be properly adjusted for each skater. The proper length will allow the skater (while suspended) to bend their knees and clear both their knees and skates from the surface.

While suspended, bend knees to clear your feet from the skatemill surface. If you can clear the surface by 5 inches then you are at the proper safety rope length.



#### **GANTRY SAFTEY SYSTEM**

The use of a safety restraint system is required by WOODWAY, we recommend that you install and use our purpose built – Four Post Safety Gantry with oval trolley track system with your skatemill. For certain installs or when a four post safety gantry is not practical; our oval trolley track system can be used separate from our four post mount. It can be mounted to the ceiling of your facility, using a mounting point that is both structurally sound and load bearing. Always consult trained professionals when mounting the oval trolley track system to your facility.

Additional harnesses and gantry trolleys can be purchased.

### **BELT DRIVE CURRENT LIMIT**

Your skatemill has a current limit feature to reduce power consumption and increase safety. The main feature is a current limit timeout, if the belt is stalled (stays in current limit) for more than 6 seconds, the motor drive will shut off and the belt will be able to be moved manually, or "freewheel". This feature becomes very useful if something should become caught in the belt and will thus stop it from spinning.

#### IF YOUR SKATEMILL GOES INTO CURRENT LIMIT MODE IT MUST BE TURNED OFF FOR AT LEAST 60 SECONDS. THE MACHINE WILL "RESET" AFTER THIS TIME PERIOD.

# Installation

# **GROUNDING INSTRUCTIONS**

This skatemill must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a power cord with a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

# LOCATION REQUIREMENTS

Locate your skatemill on a structurally sound surface. If it is to be used above ground level set it up near the corner of the room to ensure maximum support during high-speed use. The surface should be reasonably level to ensure minimum frame flexing. Do not place the skatemill directly on shag or plush carpeting because of the moving parts underneath.

## TRANSPORTING YOUR SKATEMILL

CAUTION: This BLADE skatemill is meant to be a stationary piece of equipment. Do not attempt to move the machine without a certified WOODWAY technician.

### **DISPLAY/CONTROL BOARD**

Your BLADE is equipped with an off-mount display/control board and emergency stop button that both connect to the skatemill with an electrical cord. The amount of wire is meant to allow for easy movement/mounting of the components at the owners/users discretion.

WOODWAY recommends mounting the display/control board onto a computer cart so it is both accessible and moveable for the instructor. The emergency stop button can also be mounted to the cart, be sure there is always easy and convenient access to the button.

## PLATFORM INSTALLATION

Building a raised platform that surrounds the BLADE is the safest and most convenient way to utilize your BLADE. A platform elevates the skaters to the same height as the

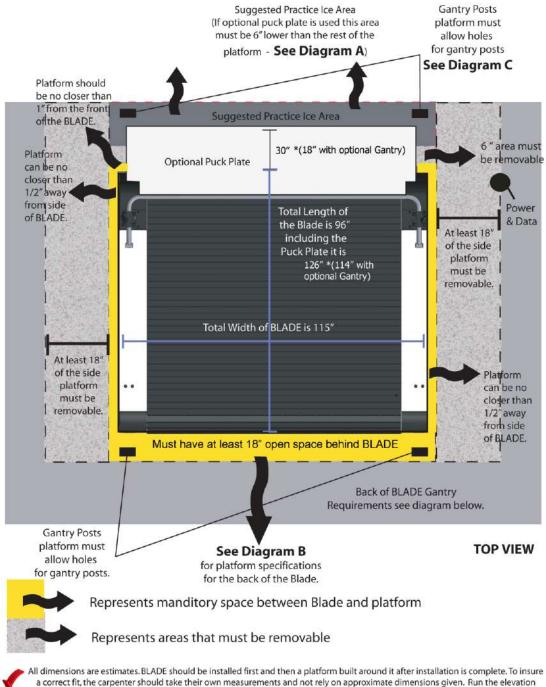
skating surface and therefore eliminates the need to climb up to the level of the machine each time getting on. It also makes for the most effective options to get off of the machine, with a wide platform surrounding the machine, the skaters can easily dismount.

When constructing a platform or pit for the BLADE, use the measurements provided on the following pages. Do not build the platform closer to the machine than that which is shown. Also remember that the machine will need occasional maintenance and the platform must be removable, to access the inner parts of the skatemill.

### PLATFORM AND FOUR POST GANTRY SET-UP



#### PLATFORM DIMENSIONS



from full decline and full incline during and after installation to insure there is no interference with the BLADE and platform.

Diagram A. Front View of the BLADE without optional puck plate

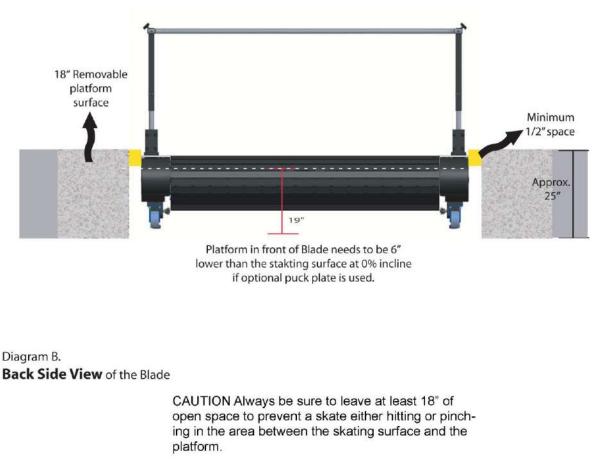
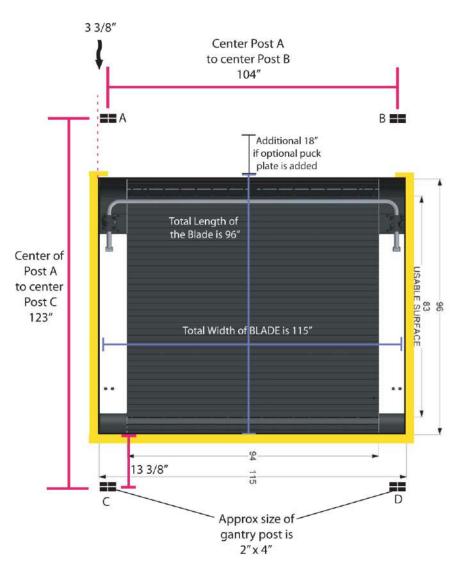




Diagram C. Approx location of gantry posts

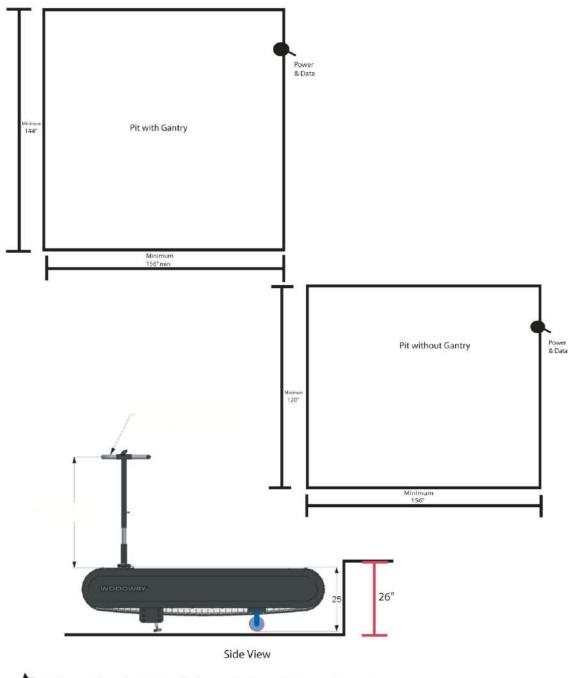


## PIT INSTALLATION

A pit installation will also give easy access to the BLADE for skaters; this is similar to a raised platform. When constructing a pit, be sure to follow the dimensions show below, allowing access to the machine for maintenance.

Refer to diagrams A, B and C above for front, side and back dimensions, including gantry dimensions.

#### **Cement Pit Install Dimensions**



 $\star$  Platform will need to be installed around unit as pit is larger than unit

# **Skatemill Fundamentals**

# SKATING SURFACE

The skating belt is made of individual slats mounted on a continuous set of tooth belts. The tooth belts mesh with the rear pulley assembly, which meshes with the drive motor. This results in no belt slippage. The positive belt engagement eliminates friction and heat, and therefore increases the longevity of the skating surface and treadmill itself.

Be aware that the skating surface will produce small shavings due to the contact with skate blades. Be sure to clean the area behind the BLADE and inspect the skating surface for debris on a weekly basis. (Always unplug machine before cleaning or maintenance)

## TRANSPORTATION SYSTEM

The transportation system is comprised of four bearing rail assemblies, endless steel wire reinforced lateral belts, and 15-inch diameter toothed roller drums. The bearing rails support the skating surface and are integral to reducing belt wear and friction.

The four endless lateral belts have many key functions: they hold the individual slats together, transfer power to and from the motor and skater and help keep the skating belt from tracking to the left or right. The four bearing rails consist of three main parts: the bearing rail, individual bearings and the bearing-supported roller guides. A smooth section of the lateral belts roll over the bearings and roller guides.

The bearing rail supports all the bearings and roller guides and distributes the local loads throughout the skatemill. The roller guides on each side assist to reduce tracking error and help support the skating belt. The individual bearings on each side also evenly distribute the load across the skatemill.

The drum assemblies have heavy-duty flange bearings which also reduce friction.

This unique transportation system results in very little friction and can even be used without power - you can simply push the skating belt under your own power!

#### SERIAL NUMBER PLACEMENT

Each WOODWAY skatemill is assigned a serial number when built. The 7 or 8 alphanumeric code can be found in two different locations on the skatemill. The serial number is on the main label located on the back of the display board housing. It is also on the front left section of the skatemill frame.

Sequential Number		
Assigned at	{XXXXX}{XY}	Date Code of
Assembly	(	Manufacture

The main label also includes information about your particular skatemill. It lists input voltage and current, and the options and/or features of your skatemill. Please refer to your packing slip or invoice or contact WOODWAY USA (**1-800-WOODWAY**) to determine the features you may have ordered, if you are in doubt, with your skatemill.

#### **INCLINE SYSTEM**

The WOODWAY BLADE has a standard elevation system of -5% up to +35%. The incline system is controlled by an ac gear motor and uses a chain and sprocket system to transfer power to a set of pinions. These pinion gears raise or lower the skatemill by gear racks. The gear racks have rubber feet and support most of the skatemill and person's weight when incline is used.

The feedback system is comprised of two sections: the incline potentiometer assembly, and the limit switches. The resolution is .1% grade and the accuracy is +/- .4% grade.

The feedback potentiometer assembly tells the display panel where the incline system is. An intermediate shaft rotates the potentiometer, via gears, when the incline system moves. The potentiometer is a one-turn potentiometer.

The limit switches are used to limit the incline system. After the display is turned on, the skatemill will automatically go to 0% or "home position." The display panel detects when the treadmill has tripped the 0% limit switch.

#### MIXING SURFACE LUBRICANT

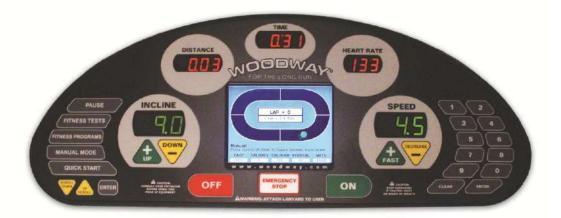
Pre-mix the surface lubricant before applying it.

- 1. Add 3 parts water to 1 part surface lubricant within the spray canister.
- 2. Seal, and shake to mix.
- 3. Pressurize the spray canister.
- 4. Apply liberally to the skating surface.
- 5. Reapply as needed.

To order more surface lubricant, contact your WOODWAY representative or call 800.WOODWAY (966-3929)

PART #	DESCRIPTION
D8293	Sprayer, Polyethylene, Capacity 1.5 Gallon
D8206	Lubricant, 1 Gallon

# **Personal Trainer Display**



### DISPLAY OVERVIEW

The buttons on these display panels allow the user to input program parameters to control skatemill operation and allows the user to monitor the progress of their workout. The emergency stop switch is a magnetic sensor that detects the presence of a magnet and performs a hard belt shutdown if removed. There are 5 seven-segment displays that show program statistics. The four-digit displays are programmed to display time in a 00:00 format.

The 128 x 256 pixel LCD display shows the user's choice of program profiles and also shows the user's progress during their workout. The program profiles indicate the speed contours in printed graphics. The incline profile is demonstrated with a sold line drawn through the speed profile.

The control panel allows the user to control or view:

- Manual Control of speed and incline
- Statistics display of Speed, Incline, Time, Calories, METs, Pace, Distance
- 12 Built-in programs, including manual operation
- 10 user-modifiable programs
- Automatic speed and incline adjustment during programs.
- User prompts and warnings
- Controlled ramping, safety checks and automatic shutdown on errors.

In order for the user to monitor the progress of their workout, the personal trainer board displays:

- Speed Profile
- Incline Profile
- Time/Vertical Feet
- Calories/Distance
- Speed/Pace

### **DESCRIPTION OF STATISTICS**

**Time:** Time is displayed in the format 00:00. Time counts up from zero in the userdefined mode. The time counts down in Programmed Run mode.

**Speed:** Speed is displayed in the format 00.0. Speed represents the user's current speed in miles per hour (or kilometers per hour) or can be used to set the desired user speed. Valid speed values are: 0.0 – top speed (which varies depending on model and options ordered).

**Distance:** Distance is displayed in the format 00.00. Distance represents the accumulated user distance in miles. Distance continues to accumulate until the program ends or until the user presses the PAUSE button.

**Calories:** Calories are displayed in the format 0000. Calories represent the accumulated user calories burned and are calculated using the user's weight (entered at the start up of a program), or if not entered by the user, a default weight of 155 lbs. Calories continue to accumulate until the program ends or until the user presses the PAUSE button.

**Pace:** Pace is displayed in the format 00:00. Pace represents the amount of time it will take to run one mile at the user's current speed.

**METs:** METs is displayed in the format 00.0 and represents 3.5 milliliters of oxygen per kilogram of body weight per minute.

**Incline:** The incline display is used to display the current user elevation or to set the user elevation. Valid incline values are -5% - +35% (top level of incline which varies based on model and options ordered) in 0.1% increments.

### "QUICK START" (USER DEFINED OPERATION)

First, make sure to check that the skatemill is plugged in and that the power switch (within lower right-hand cut-out) has been turned on. Make sure the EMERGENCY STOP Magnet is positioned correctly.

To power-up the display, press the "ON" button until the LED and LCD displays are illuminated – NOTE, this process can take up to 3 seconds! The LCD display in the center of the panel will read "Press 'FAST' for Quick Start, Press 'SLOW' for Manual Mode, or select a program." The user can choose to follow the directions or simply enter the speed and incline values desired. If the slow button is pressed, the display will be in a user-directed mode. The LCD display will read "Enter Weight = 150, Press ENTER." The user must enter WEIGHT or accept the default weight of 150 and begin the manual workout, or the user may enter their actual weight by using the keypad or FAST button and then ENTER. Valid weights are 50-500 pounds (or 22-227 kilograms). The clear button may be used to erase the currently displayed weight. Once the user has entered their weight, they may press the ENTER button to accept it. The text "Press FAST to begin workout" will then appear in the LCD display. Once the user presses the FAST button, the workout will begin.

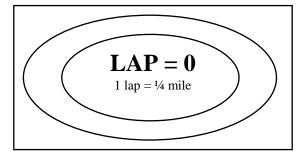
# USING QUICK START MODE

Time will begin counting up from zero, speed will be set to 0.1 mph and the distance and calories will begin accumulating. The LCD display will illustrate a quarter-mile oval track. A flashing dot will move around the track (in a counter clock-wise direction) representing the user's distance. The center of the track will read "Laps = 0." Each lap around the track represents one-quarter of a mile. The lap counter will increase by one with every completed lap. Four laps is equivalent to the distance of one mile.

The numeric keys, CLEAR button and ENTER button are disabled during this time.

However, while running the user-directed mode program, the user may change incline using the UP and DOWN Incline buttons or change speed using the FAST and SLOW speed buttons. The user may PAUSE the program at any time by pressing the PAUSE button.

The user-defined track is laid out as shown in the figure below:



**Pausing Workout:** If the user presses the PAUSE button, the belt will come to a stop and seek minimum incline. The LCD display will read "Skatemill Paused. Press PAUSE to resume." Statistics will freeze with the current session values at the time the PAUSE button was pressed.

Once the user presses the PAUSE button again, the workout will resume. While paused, the CLEAR button will be enabled. Pressing the CLEAR button will reset all of the skatemill statistics. At any time during the workout, the user may press the PACE/CAL/METs button to view the respective statistics. One this button is pressed, the LCD display will show "PACE = 00:00, CALORIES = 0000, METs = 00." These values will remain on the display for a period of 4 seconds, after which the LCD display will return to its original display. If the Off button is pressed, the speed and incline will return to zero. The LCD will show "Totals, Calories = 0000, Distance = 00.00, Time = 0:00:00" for 5 seconds. The display will shut off.

NOTE: Before starting any programmed workout, it is advisable to consult a certified exercise professional or personal physician.

## STARTING A PROGRAMED WORKOUT

If a program button is pressed when the user is prompted to "press 'FAST' for Quick Start or select a program," program set-up will begin.

**Entering Workout Level**: The LCD display will show the associated program profile and title of that program for three seconds. The LCD will then read, "Enter Workout Level 1-10 and press ENTER." A default would level of 1 will be displayed. The numeric keys may be used to enter desired workout level. When selecting a workout level, the user should consider their current fitness level and workout goals. The CLEAR button may be used to erase the currently displayed workout level. When the user finishes entering the desired workout level, they may press the ENTER button to accept it.

**Entering Weight:** The LCD display will then read "Enter Weight = 150, Press ENTER." For a Quick Start, the user may simply bypass the weight menu by pressing the FAST button to accept the default weight of 150 and begin the user-directed workout, or enter his/her weight using the keypad. Valid weights are 50 - 500 lbs (or 22 - 227 kilograms). The CLEAR button may be used to erase the currently displayed weight. One the user has entered their weight, they may press the ENTER button to accept it.

**Entering Workout Time:** The LCD display will then read "Enter Workout Time 10-99 Min, Press ENTER." A default time of 10:00 will appear on the display. The user may use the numeric keys to enter their desired workout duration. Valid times are 10-99 minutes. The CLEAR button may be used to erase the currently displayed time. Once the user has entered their desired workout duration, they can press the ENTER button to accept it. The text "Press FAST to begin workout" will appear on the LCD display. Once the user presses the FAST button, their workout will begin.

At the Start of the Program: Time will begin counting down, speed will be set to the first segment speed and incline will be set to the first segment incline. Distance and calories will begin accumulating. The LCD display will show the program profile. The numeric keys, the CLEAR and ENTER buttons will now be disabled.

**Variables that can be used During a Program:** While running the program, the user may change incline using the UP and DOWN incline buttons or change speed using the FAST and SLOW speed buttons. The user may pause the program at any time by pressing the PAUSE button. The state of the program you are in will be flashing to show your progress. The beeper will sound 3 seconds prior to speed and/or grade changes.

**If PAUSE is pressed during a Workout:** If the PAUSE button is pressed, the belt will come to a stop and seek minimum incline. The LCD display will read "Treadmill Paused. Press PAUSE to resume." Statistics will freeze with the current session values at the time the PAUSE button was pressed. Once the user presses the PAUSE button again, the workout will resume. While paused, the CLEAR button will be enabled. Pressing the CLEAR button will reset all of the skatemill statistics and return the user to the opening screen (the LCD display will read "Press 'FAST' for Quick Start or select a program.")

**Viewing Statistics:** At any time during the workout, the user may press the PACE/CAL/METs buttons to view these statistics. Once this button is pressed, the LCD display will show "PACE = 00:00, CALORIES = 0000, METS = 00." These values will remain on the display for a period of 4 seconds, after which the LCD display will return to its original display.

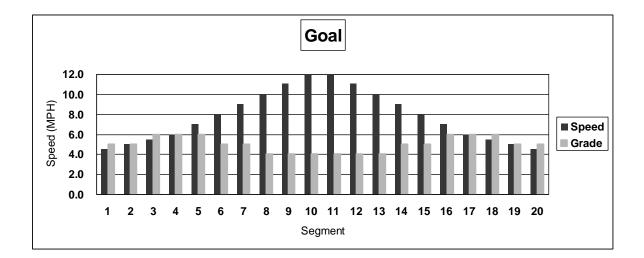
At the end of a Program: When the program time expires, the LCD will read "Program Complete" for 3 seconds. The speed and elevation then return to zero.

IF the OFF button is pressed, the speed and incline will return to zero. The LCD will show "Totals, Calories = 0000, Distance = 00.00, Time = 0:00:00" for 5 seconds. The display will shut off.

### **PROGRAM PROFILES**

**Goal Program**: This is a conditioning program that peaks in the middle of workout. This program is designed to build strength and stamina.

											SPEE	D DAT	A								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.5	0.5
	2	0.9	1.0	1.1	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.4	2.2	2.0	1.8	1.6	1.4	1.2	1.1	1.0	0.9
	3	1.4	1.5	1.7	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.6	3.3	3.0	2.7	2.4	2.1	1.8	1.7	1.5	1.4
	4	1.8	2.0	2.2	2.4	2.8	3.2	3.6	4.0	4.4	4.8	4.8	4.4	4.0	3.6	3.2	2.8	2.4	2.2	2.0	1.8
Level	5	2.3	2.5	2.8	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.8	2.5	2.3
	6	2.7	3.0	3.3	3.6	4.2	4.8	5.4	6.0	6.6	7.2	7.2	6.6	6.0	5.4	4.8	4.2	3.6	3.3	3.0	2.7
	7	3.2	3.5	3.9	4.2	4.9	5.6	6.3	7.0	7.7	8.4	8.4	7.7	7.0	6.3	5.6	4.9	4.2	3.9	3.5	3.2
	8	3.6	4.0	4.4	4.8	5.6	6.4	7.2	8.0	8.8	9.6	9.6	8.8	8.0	7.2	6.4	5.6	4.8	4.4	4.0	3.6
	9	4.1	4.5	5.0	5.4	6.3	7.2	8.1	9.0	9.9	10.8	10.8	9.9	9.0	8.1	7.2	6.3	5.4	5.0	4.5	4.1
	10	4.5	5.0	6.5	6.0	7.0	8.0	9.0	10.0	11.0	12.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0	5.5	5.0	4.5
	GRD	5.0	5.0	6.0	6.0	6.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	6.0	6.0	6.0	5.0	5.0



**Test Program**: This program has been designed to determine the user's current fitness level. Utilizing the Balke Protocol, this program will evaluate the functional aerobic capacity (VO2max) which is used to classify the user's cardio-respiratory fitness. With increasing workload, oxygen uptake (VO2) eventually plateaus. This is the maximum VO2 value we are seeking. A chest strap is required for this test. Changing the speed or incline will invalidate the test. The test will end when the user's heart rate stabilizes at 130 BPM or 85% of the user's maximum heart rate. Time will be forced to 20 minutes as there are 20 program segments. Realistically, the test will end sooner. According to this protocol, speed is constant at 3.4 mph. Incline is 0% for 1st minute and 2% for 2nd minute. Each minute thereafter, incline will increase by 1% until the test ends.

The fitness test will terminate when the user's heart rate reaches 130 bpm or 85% of maximum heart rate, whichever is less. A fitness score will be displayed along with one of the charts below so the user may assess their fitness level.

	10-19	20-29	30-39	40-49	50-59	60-69	70-79
High	56+	53+	49+	45+	43+	41+	39+
Good	46-55	43-52	39-48	36-44	34-42	31-40	29-38
Average	36-45	34-42	31-38	27-35	25-33	23-30	21-28
Fair	27-35	25-33	23-30	20-26	18-24	16-22	14-20
Low	<27	<25	<23	<20	<18	<16	<14

Men

#### Fitness Score – VO2 Max Score

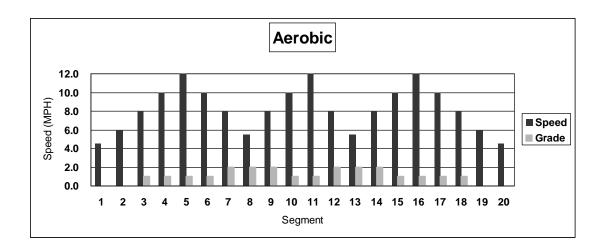
#### Women

	10-19	20-29	30-39	40-49	50-59	60-69	70-79
High	53+	49+	45+	42+	38+	35+	33+
Good	41-52	38-48	34-44	31-41	28-37	24-34	22-32
Average	33-40	31-37	28-33	24-30	21-27	18-23	15-21
Fair	27-32	24-30	20-27	17-23	15-20	13-17	11-14
Low	<27	<24	<20	<17	<15	<13	<11

Fitness Score – V02 Max Score

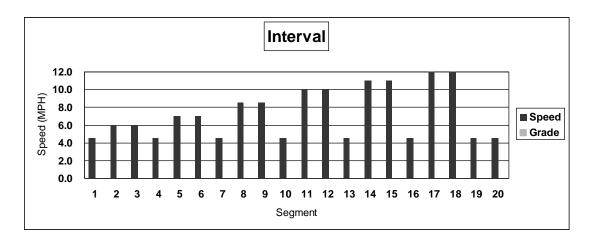
**Aerobic Program**: A high-level workout with three high intensity periods. This program is designed for aerobic conditioning.

						SPEE	D DAT	A													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1	0.5	0.6	0.8	1.0	1.2	1.0	0.8	0.6	0.8	1.0	1.2	0.8	0.6	0.8	1.0	1.2	1.0	0.8	0.6	0.5
	2	0.9	1.2	1.6	2.0	2.4	2.0	1.6	1.1	1.6	2.0	2.4	1.6	1.1	1.6	2.0	2.4	2.0	1.6	1.2	0.9
	3	1.4	1.8	2.4	3.0	3.6	3.0	2.4	1.7	2.4	3.0	3.6	2.4	1.7	2.4	3.0	3.6	3.0	2.4	1.8	1.4
	4	1.8	2.4	3.2	4.0	4.8	4.0	3.2	2.2	3.2	4.0	4.8	3.2	2.2	3.2	4.0	4.8	4.0	3.2	2.4	1.8
<u>Level</u>	5	2.3	3.0	4.0	5.0	6.0	5.0	4.0	2.8	4.0	5.0	6.0	4.0	2.8	4.0	5.0	6.0	5.0	4.0	3.0	2.3
	6	2.7	3.6	4.8	6.0	7.2	6.0	4.8	3.3	4.8	6.0	7.2	4.8	3.3	4.8	6.0	7.2	6.0	4.8	3.6	2.7
	7	3.2	4.2	5.6	7.0	8.4	7.0	5.6	3.9	5.6	7.0	8.4	5.6	3.9	<b>5</b> .6	7.0	8.4	7.0	5.6	4.2	3.2
	8	3.6	4.8	6.4	8.0	9.6	8.0	6.4	4.4	6.4	8.0	9.6	6.4	4.4	6.4	8.0	9.6	8.0	6.4	4.8	3.6
	9	4.1	5.4	7.2	9.0	10.8	9.0	7.2	5.0	7.2	9.0	10.8	7.2	5.0	7.2	9.0	10.8	9.0	7.2	5.4	4.1
	10	4.5	6.0	8.0	10. <b>0</b>	12.0	1 <b>0</b> .0	8.0	5.5	8.0	<b>10</b> .0	12.0	8. <b>0</b>	6.5	8.0	10. <b>0</b>	12.0	1 <b>0</b> .0	8.0	6.0	4.5
	GRD	0.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	1.0	1.0	2.0	2.0	2.0	1.0	1.0	1.0	1.D	0.0	0.0



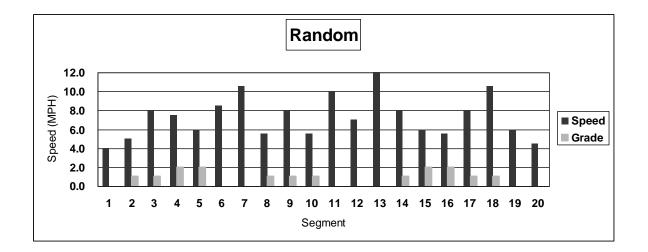
Interval Program: A gradually increasing workload program, interspersed with a resting
interval at every third stage.

					SPEED DATA																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
	2	0.9	1.2	1.2	0.9	1.4	1.4	0.9	1.7	1.7	0.9	2.0	2.0	0.9	2.2	2.2	0.9	2.4	2.4	0.9	0.9
	3	1.4	1.8	1.8	1.4	2.1	2.1	1.4	2.6	2.6	1.4	3.0	3.0	1.4	3.3	3.3	1.4	3.6	3.6	1.4	1.4
	4	1.8	2.4	2.4	1.8	2.8	2.8	1.8	3.4	3.4	1.8	4.0	4.0	1.8	4.4	4.4	1.8	4.8	4.8	1.8	1.8
<u>Level</u>	5	2.3	3.0	3.0	2.3	3.5	3.5	2.3	4.3	4.3	2.3	5.0	5.0	2.3	5.5	5.5	2.3	6.0	6.0	2.3	2.3
	6	2.7	3.6	3.6	2.7	4.2	4.2	2.7	5.1	5.1	2.7	6.0	6.0	2.7	6.6	6.6	2.7	7.2	7.2	2.7	2.7
	7	3.2	4.2	4.2	3.2	4.9	4.9	3.2	6.0	6.0	3.2	7.0	7.0	3.2	7.7	7.7	3.2	8.4	8.4	3.2	3.2
	8	3.6	4.8	4.8	3.6	5.6	5.6	3.6	6.8	6.8	3.6	8.0	8.0	3.6	8.8	8.8	3.6	9.6	9.6	3.6	3.6
	9	4.1	5.4	5.4	4.1	6.3	6.3	4.1	7.7	7.7	4.1	9.0	9.0	4.1	9.9	9.9	4.1	10.8	10.8	4.1	4.1
	10	4.5	6.0	6.0	4.5	7.0	7.0	4.5	8.5	8.5	4.5	10.0	10.0	4.5	11.0	11.0	4.5	12.0	12.0	4.5	4.5
	GRD	0.0	0.0	0.0	0.0	D.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



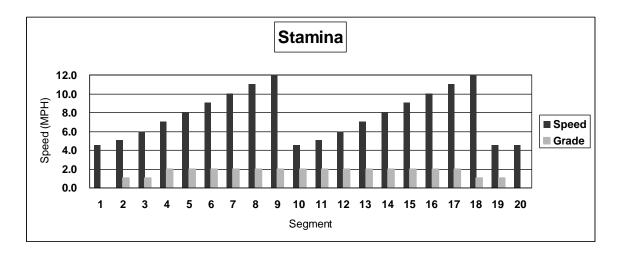
**Random Program**: A fun and challenging workout program. Random intervals offer varying speed and elevation changes.

						SPEE	D DAT	A													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1	0.4	0.5	0.8	0.8	0.6	0.9	1.1	0.6	0.8	0.6	1.0	0.7	1.2	0.8	0.6	0.6	0.8	1.1	0.6	0.5
	2	0.8	1.0	1.6	1.5	1.2	1.7	2.1	1.1	1.6	1.1	2.0	1.4	2.4	1.6	1.2	1.1	1.6	2.1	1.2	0.9
	3	1.2	1.5	2.4	2.3	1.8	2.6	3.2	1.7	2.4	1.7	3.0	2.1	3.6	2.4	1.8	1.7	2.4	3.2	1.8	1.4
	4	1.6	2.0	3.2	3.0	2.4	3.4	4.2	2.2	3.2	2.2	4.0	2.8	4.8	3.2	2.4	2.2	3.2	4.2	2.4	1.8
Level	5	2.0	2.5	4.0	3.8	3.0	4.3	5.3	2.8	4.0	2.8	5.0	3.5	6.0	4.0	3.0	2.8	4.0	5.3	3.0	2.3
	6	2.4	3.0	4.8	4.5	3.6	5.1	6.3	3.3	4.8	3.3	6.0	4.2	7.2	4.8	3.6	3.3	4.8	6.3	3.6	2.7
	7	2.8	3.5	5.6	5.3	4.2	6.0	7.4	3.9	5.6	3.9	7.0	4.9	8.4	5.6	4.2	3.9	5.6	7.4	4.2	3.2
	8	3.2	4.0	6.4	6.0	4.8	6.8	8.4	4.4	6.4	4.4	8.0	5.6	9.6	6.4	4.8	4.4	6.4	8.4	4.8	3.6
	9	3.6	4.5	7.2	6.8	5.4	7.7	9.5	5.0	7.2	5.0	9.0	6.3	10.8	7.2	5.4	5.0	7.2	9.5	5.4	4.1
	10	4.0	5.0	8.0	7.5	6.0	8.5	10.5	5.5	8.0	5.5	10.0	7.0	12.0	8.0	6.0	5.5	8.0	10.5	6.0	4.5
	GRD	0.0	1.0	1.0	2.0	2.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	1.0	2.0	2.0	1.0	1.0	0.0	0.0



**Stamina Program**: An increasing workload program with two separate periods of peak workload.

						<u>SPEE</u>	D DAT	Ά													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.5	0.5
	2	0.9	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	0.9	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	0.9	0.9
	3	1.4	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	1.4	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	1.4	1.4
	4	1.8	2.0	2.4	2.8	3.2	3.6	4.0	4.4	4.8	1.8	2.0	2.4	2.8	3.2	3.6	4.0	4.4	4.8	1.8	1.8
Level	5	2.3	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	2.3	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	2.3	2.3
	6	2.7	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	2.7	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	2.7	2.7
	7	3.2	3.5	4.2	4.9	5.6	6.3	7.0	7.7	8.4	3.2	3.6	4.2	4.9	5.6	6.3	7.0	7.7	8.4	3.2	3.2
	8	3.6	4.0	4.8	5.6	6.4	7.2	8.0	8.8	9.6	3.6	4.0	4.8	5.6	6.4	7.2	8.0	8.8	9.6	3.6	3.6
	9	4.1	4.5	5.4	6.3	7.2	8.1	9.0	9.9	10.8	4.1	4.5	5.4	6.3	7.2	8.1	9.0	9.9	10.8	4.1	4.1
	10	4.5	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	4.5	4.5
	GRD	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	0.0



**CHANGING A PROGRAM DURING A WORKOUT**: If a user is running any program (user-defined, predefined, heart rate control or programmable) and wishes to choose a different program, they have several options:

Do not wish to retain current program statistics? Simply press the OFF button followed by the ON button to reset the skatemill.

Choose another workout.

Enter Pause Mode and then press a program button (example: interval). The profile associated with that program button will appear on the LCD display. The user may then setup the program and begin his workout. Because statistics were not



cleared, the statistics from the previous workout will be retained. Upon completion of this workout, the final program statistics will include statistics from this workout and the previous workout.

**PROGRAMMING USER PROGRAMS:** There are 10 user program profiles. Each profile consists of 40 segments, each with a programmable time, speed and incline setting.

If a numeric key is pressed while the user is prompted to "Press 'FAST' for Quick Start or select a program", program setup will begin. The user program associated with that numeric key will appear on the LCD display. The user may then setup the program and begin their workout. The user will not enter a workout duration for user programs. Workout durations are calculated by adding each of the segment time values (for that profile) stored.

**Editing User Programs:** To edit one of the 10 user programs, press "ENTER" after selecting a user program. The edit user program screen will appear.

The user program number will appear next to the "edit user program:" heading. Segment number one will be displayed and highlighted. The UP and DOWN incline buttons or the FAST and SLOW speed buttons may be used to increment or decrement the segment number. Press ENTER to begin editing that segment or press PAUSE to erase/reset the current saved program. The speed value for segment one will be highlighted. The numeric keys or the speed arrow keys may be used to enter a speed value. Press ENTER to store that value and highlight the incline value. The numeric keys or the incline arrow keys may be used to enter an incline value. Press ENTER to store that value and highlight the time value. The numeric keys may be used to enter a segment time length. Press ENTER to store that value and advance to the data for the next segment. Repeat this process for all 40 segments. When programming is complete, press the OFF button to exit the edit user programs screen and turn the skatemill off.

# Chapter

# How to Use the BLADE and its Safety Features

#### STARTING AN ATHLETE

Each BLADE user must wear a safety harness and utilize a safety suspension system to prevent injury due to falls. Before using the machine, the following gantry set up and harness hook-up must be followed each time.

Show pictures of how the harness is hooked up to the athlete. Ensure the gantry harness is at the right height by having the athlete sit back into a seated position. They should be able to sit in a supported position knees at a right angle as if they were sitting in a chair. Then have the athlete kneel forward holding their legs up. The should be able to be suspended comfortably at the same height as when seated with their knees at a right angle and their skates 5 inches above the floor level.

Note, when tightening the harness ensure the harness is not too tight as it may impede skating movement and potentially cause a groin strain.

Please also ensure that all skaters wear protective clothing while on the BLADE.

#### SAFTEY HARNESS

Always properly fit the safety harness before hooking/connecting to the gantry suspension system.

# FOLLOW THE DIRECTIONS/INSTRUCTION MANUAL PROVIDED WITH EACH HARNESS SYSTEM TO ASSURE PROPER USE

BE AWARE - THERE ARE VARIATIONS OF SAFTEY HARNESSES SUCH AS SIZED VESTS AND UNIVERSAL FIT HARNESSES





#### THE FITTING INSTRUCTIONS ARE PACKAGED WITH THE HARNESS

The safety harnesses should fit snuggly, but not tight. There must be enough room for movement when skating as to not cause uncomfortable tension or binding. The harness may seem awkward for users, but after a few uses it will no longer be noticeable.



#### SAFTEY SUSPENSION SYSTEM

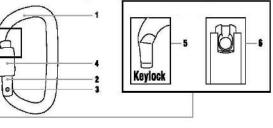
OPEN

A single rope/harness safety system consists of the following items: one trolley mounting mechanism that rides in oval trolley track, one single vertical rope, two locking carabineers, one Petzel Traxion device and one user safety harness.

**<u>CARABINEER</u>**- The carabineer is used to connect the trolley to the suspension rope and the Traxion Device (attached to the rope) to the skater's harness.



Nomenclature of parts



- (1) Body (2) Gate
- (3) Hinge
- (4) Locking sleeve
- (5) Keylock
- (6) Keylock slot

1. Manipulation



To open the carabineer, push up on the locking sleeve and simultaneously twist.

To close simply release and the unit will automatically lock.



#### SETTING UP THE ROPE SUSPENSION SYSTEM/TRAXION DEVICE

#### **Connecting the Traxion Device**

1. Attach the rope to the trolley mounting device using one locking carabineer, and place the trolley into the oval track system. The rope should hang down toward the skating surface.



Open the Petzel Traxion device and place on rope with the red lever in the "open" position as shown. 3.

With the rope in position, close the red lever.

4. With the red lever closed, move the locking lever to the "gripping" position

Lever in "open" position



Lever in "gripping" position



5. With lever in "gripping" position, test the system by pulling down and making sure the Traxion cannot be pulled down. When the lever is in the gripping position the Traxion can move up but not down when the lever is in the open position the Traxion can move up and down



#### Connecting the Carabineer to the Traxion device

6. With the Traxion device locked (see steps 4 & 5 above), prepare to attach the carabineer. This will connect the safety harness the skater is wearing to the gantry.









7. Open the carabineer by pushing up on the locking sleeve and twisting simultaneously.

8. Slide the carabineer through the open hole of the Traxion device and close the carabineer, upon release of the locking sleeve, the unit will automatically

9. Spin the carabineer 180 degrees so that when the gate is open, the body of the carabineer acts as a hook.

\*\*The carabineer must always be positioned this way to assure proper use.



The carabineer that attaches the trolley to the safety rope should be manipulated the same as shown above, connect to the loop of the trolley and then spin 180 degrees.

#### Connecting the Carabineer from the Traxion device to the Harness



10. Open the carabineer and hook it to the large metal loop located on the back of the harness. Release the locking sleeve to lock the carabineer.

NOTE: Harnesses may have additional loops, only use the loop located in the center of the back near the neckline.

For carabineer attached to the trolley, attach rope loop in same fashion as harness loop.



11. Before using the BLADE, be sure the carabineer is locked. The strength of the carabineer is seriously compromised when it is not closed properly.

ALWAYS check to make sure the carabineer is locked with the Traxion device and safety harness loop in their proper positions outlined above.

#### SETTING PROPER SAFETY LENGTH

# MAKE SURE THE BLADE SKATEMILL IS COMPLETELY OFF WHEN SETTING UP SAFTEY HARNESS/GANTRY SYSTEM

#### **NEVER USE A TRAXION DEVICE THAT IS NOT WORKING PROPERLY!**

#### ALWAYS INSPECT THE CARABINEER TO MAKE SURE IT IS IN PROPER WORKING CONDITION< CHECKING TO MAKE SURE THE GATE LOCKS AND IS FREE OF OBSTRUCTIONS.

1. With the harness properly fitted, have the skater hold onto the hand rail in the center of the skating surface.

2. Now move the Traxion device near the end of the suspension rope (the suspension rope should be properly connected to the trolley device).

3. Place the Traxion device in the lock position and pull down to be sure that it will hold firmly. The Traxion device should hold tight.

4. Now connect the skater/harness to the Traxion device. Slide the Traxion device up the rope so the skater is at the length of the safety rope/strap when holding onto the handle.









5. Now to insure the gantry harness is at the correct height, have each athlete center themselves on the skating surface and drop to a seated position. They should be able to sit in a supported position knees at a right angle as if they were sitting in a chair. Now have the athlete lean forward and hold their legs up, keeping them above the skating surface. This is the position they must take when/if they fall. The skates should be about 5 inches above the surface.

#### IN THE INSTANCE OF A FALL, SKATES MUST PULL AND HOLD THEIR LEGS/SKATES FROM TOUCHING THE SKATING SURFACE UNTIL IT HAS COME TO A COMPLETE STOP!



#### **ADJUSTING HANDRAIL HEIGHT**

1. Loosen the knobs within both outer square vertical uprights that allow the handrail to be adjusted forward & aft by turning them counterclockwise.



 Loosen the knurled locknut on the adjustable locking pin by turning it counterclockwise.



3. Loosen the 4-spoke handle while holding the threaded housing of the pin by turning it counter-clockwise.



4. Push up on the square vertical upright.



- 5. Push the blue detent button on the end of the adjustable locking pin.



6. Pull the adjustable locking pin out.



 While holding the above position, press the blue detent button on the end of the adjustable locking pin and insert it through the holes in both the outer square vertical upright and the inner round vertical upright.



7. Slide the outer square vertical upright on the inner round vertical upright to the incremental desired height and align the through holes for that position.



 Release the blue detent button on the end of the adjustable locking pin and pull the pin outward. It will stop when the balls on the pin contact the inside of the inner round vertical upright.



10. You no longer need to hold the outer square vertical upright in place. The pin will now hold it in place.

#### SKATING FUNDAMENTALS

It is necessary for each skater to develop their BLADE skating abilities in a gradual progression. The motion and feel associated with the skating surface will not be exactly the same as skating on ice. Each skater should do the following, regardless of age or ability.

1. While standing on the side platform and the BLADE stopped, move to the center of the machine, holding onto the hand rail.

The handle bar should be about chest height while the skater is in a slightly crouched position.



2. With skates flat on surface and arms firmly gripped to hand rail, begin to move the skating surface in increments of 0.1 so the skater can get a gradual feel of the skating surface movement. The skater should be in a "glide" position.

3. After the skater gets comfortable with the surface movement at a speed of 2 mph, still holding the rail, have them begin to do figure "s" movements to get the feel of skate BLADE edge contact.

4. The next step is to glide on one skate BLADE while pushing off in a skating stride on the other leg. Be sure the athlete continues to hold onto the hand rail. Repeat this for a few minutes and then have them change legs and perform push off extensions with the opposite leg.

5. Once the athlete has gained a good feel and understanding for the skating surface, they should being normal skating motion with both legs while holding onto the handrail.

6. Be sure the skater has developed a strong feel and confidence before they attempt to skate without gripping the hand rail. Gradually remove one hand at a time until the athlete can skate without holding on.

### **Skating Backwards**

#### REVERSE

The BLADE can be used in reverse mode to skate backwards. To put the skatemill in reverse, put the speed at zero and hold the "slower or negative speed arrow" until it beeps three times. Now push the button to adjust reverse speed, as you would in forward.

#### FORWARDS/BACKWARDS TRANSITIONS

Skaters can transition from frontward to backward skating. When skating backwards, the athlete must be in the center of the skating surface. This will prevent the skater from moving/skating backwards toward the handrail and puck plate.

#### BE AWARE OF THE POTENTIAL DANGERS OF PUCK PLATE INTERFERENCE WHEN PERFORMING FORWARD TO BACKWARD TRANSITIONS.

Chapter

# **Skatemill Maintenance**

#### **CLEANING AND INSPECTION**

Periodic cleaning and inspection will help lengthen the life of your skatemill and keep it looking good. It will also be easier to spot any problems that might not otherwise be found until it is too late.

Below is a guideline on cleaning and maintenance intervals. If the skatemill is in a dirty environment or under heavy-duty use, cleaning and inspection intervals should be done more frequently.

Do not use abrasive brushes or cleaners, as they will mar and scratch the paint and plastic surfaces. Also, do not soak any surface, as the sensitive electronics can be harmed.

**CAUTION**: Turn off Skatemill and disconnect the power cord before cleaning.

#### Weekly:

- Clean & lubricate the skating surface & bumpers.
- Clean handrail, front display panel & cosmetic covers.
- Inspect power cord.
- Check overall condition of the skatemill.
- Vacuum underneath the skatemill.
- Clean plastic shavings from behind the BLADE

#### Every Six (6) Months:

- Vacuum inside the skatemill (unplug and remove cosmetic covers).
- Inspect all nuts and bolts. Tighten any that are loose.
- Check the drive belt replace if belt is shredding or teeth are missing.

#### Yearly:

• Grease front and rear pulleys, the lateral belts, elevation gear racks, and bearings.

#### LUBRICATION

**Bearings**: Almost all of the bearings used in the skatemill are pre-lubricated and do not need to be greased. On a yearly basis, the four (4) bearings located at the end of the front shaft and rear shaft will need to be lubricated.

#### 4 bearings 2 per shaft. Place where you see arrow.



**Belt:** The teeth on the bottom of the skating belt are pre-lubricated to aid in reducing noise. There is no need to lubricate the teeth. If the v-guide skating belt is rubbing against the flange of the drive pulleys, then put a small amount of grease (i.e. Molykote or equal) on the belt to help reduce the noise. Be careful not to put too much grease on the belt, as it will only collect dust and dirt.

**Drive Belt**: As in the case of the skating belt, the application of grease on the edge of the drive belt is only needed to reduce belt squeak and should be applied sparingly.

**Incline System:** The incline systems on WOODWAY treadmills and skatemills are greased at the factory. If utilized for many hours or if in a very dusty environment, the incline system will need to be checked. If lubrication is required, apply a small amount of grease on the chains and on the incline drive screws.

#### Remember: Too much grease will make a mess and will accumulate dust and dirt.

#### ADJUSTMENTS AND CALIBRATION

**Incline System:** The rack and pinion style incline system is used in WOODWAY treadmills and skatemills.

**Skating Belt:** The belt should not require periodic adjustment. However, if the skating belt or associated parts have been changed, then the belt tension should be checked.

Skatemill Mounting Feet: Tools required: 2 foot level, 3/4 inch wrenches

If the skatemill wobbles or seems unstable, the skatemill's mounting feet must be checked. Using the level, check the front and rear ends of skatemill. Loosen the tensioning nut and turn the foot until it is at the correct level. Tighten the tensioning nut.

#### ITEMS AND SERVICES AVAILABLE FROM WOODWAY

\$16.50
\$40.00
\$48.00
\$24.50
\$275.00
\$249.00
\$99.00
\$1,500.00
\$295.00
all for quote

\* Prices do not include shipping & handling.
\* Contact the WOODWAY Service Department or your Sales Representative to order at 1-800-966-3929.



# Troubleshooting

#### **REPAIRS**:

DO NOT attempt to service the skatemill yourself except for the minor maintenance described in this manual. Contact WOODWAY Service directly with any problems.

If you are having problems with your skatemill, try to prepare answers to the following questions before you call our service center.

#### QUESTIONS:

- What is the make, model, and serial number of the skatemill?
- What happened prior to the problem?
- Did the problem happen unexpectedly or did it get progressively worse over time?
- If it is a noise problem, from where does the noise originate?
- Was someone using the skatemill at the time the problem occurred?
- Explain any other symptoms that you feel are relevant.

#### **PROBLEMS:**

**No Display**: If the skatemill's display does not light up when powered up, check the following items.

- Input power fuse(s) replace if blown
- Power coming out of wall outlet
- Check power with another piece of equipment (radio, fan, etc.). Check main fuse or circuit breaker. Move to another outlet.
- Is the skatemill plugged in?
- Is the safety magnet (activator) installed or positioned correctly? Try to reposition.
- Check all connectors at display and at circuit boards.

#### **Belt Movement:**

#### BELT LOOSE (CAN PUSH BY HAND)

Suggestions:

- Is the Safety magnet or activator installed or positioned correctly? Try repositioning.
- Is the Display working properly?
- If the display works, and/or the incline works, unplug the treadmill and wait at least 60 seconds before plugging it back in.

#### BELT TIGHT (HARD TO PUSH)

Suggestions:

- Check to see if the Incline system works (if applicable).
- If the incline system works, check the handrail switches for binding caps and covers (press increase

#### **BELT BINDING**

Suggestion: Check for obstructions and remove, if possible.

#### Incline Does Not Work:

Suggestions:

- Check incline handrail switches for binding caps and covers.
- Check for any noises from the incline motor (brake sticking? motor stalled?)

#### Erratic or Blinking Displays:

Probable causes: Low line voltage; Too much load on same line.

Suggestion: remove other machines. Install skatemill on a dedicated line.

#### Squeaking Sounds:

Possible causes:

- Noisy bearing(s). Suggestion: grease or replace the bearings.
- Drive belt rubbing against drive pulleys. Suggestion: lightly grease edge of drive belt.
- Skating belt rubbing against drive pulleys. Suggestion: lightly grease edge of skating belt.

# **PREVENTATIVE MAINTENANCE LOG**

DATE	MAINTENANCE PERFORMED?	BY	RESULT

#### NUMBERS TO KNOW

Your Skatemill Serial #(s): Model/#	
Model/#	

(The serial number can be found on the back of the skatemill's display board housing & also on the front/left section of skatemill frame – side cover must be removed to locate on the frame).

DIALING UP WOODWAY:

**800-WOODWAY** (966-3929)

WOODWAY Technical Support (ask for service) WOODWAY Customer Service WOODWAY Sales (let us know what state you live in)

# **NOTES**

Chapter

## **Warranty Information**

# THE BLADE SKATEMILL MUST NOT BE USED FOR A PERIOD OF 72 HOURS AFTER INSTALLATION

# The BLADE utilizes adhesives that require 3 days to properly cure. Using the machine before this time period voids warranty and could cause harm to individuals using the skatemill

#### Motor 3 years, Parts 3 years (excluding skating surface), Labor 1 year

WOODWAY warrants that all products and accessories will be free from manufacturing defects according to the applications/terms listed above. The warranty period commences on the original date of purchase (with the exception of the running belt component, which is warranted for a period of four (4) years from the original date of purchase). This warranty is given only to the original purchaser. This warranty does not cover damage or equipment failure resulting from misuse, abuse, or failure to comply with electrical codes. Further, this warranty shall not apply if there is any modification to the products or accessories or if there is a failure to provide maintenance as outlined in the owner's manual.

#### WOODWAY GIVES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. THE WARRANTY OF FITNESS FOR A PARTICULAR USE IS HEREBY DISCLAIMED.

The buyer's remedy for breach of the expressed warranties contained herein shall be limited to the return of the product and accessories and repayment of the original purchase price. Provided, however, at WOODWAY selection, it may repair and replace the non-conforming goods or parts. WOODWAY shall not be liable for any incidental or consequential damages.



## For The Long Run®

# 800-WOODWAY (966-3929)