

# SRM-M OPERATIONAL MANUAL





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## NOTE:

BEFORE EXERCISING ON THE VERSACLIMBER, READ THIS OPERATION MANUAL THOROUGHLY. INSTRUCT OTHERS HOW TO USE THE MACHINE IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THIS MANUAL. ADDITIONAL MANUALS ARE AVAILABLE UPON REQUEST FROM HEART RATE, INC. BEFORE BEGINNING THIS OR ANY OTHER EXERCISE PROGRAM, CONSULT YOUR PHYSICIAN. THIS IS ESPECIALLY IMPORTANT FOR THOSE INDIVIDUALS OVER THE AGE OF 30 AND THOSE WHO HAVE KNOWN HEALTH PROBLEMS. HRI ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE SUSTAINED BY OR THROUGH THE USE OF THE VERSACLIMBER.

## DON'T CLIMB TOO FAST

Beginners should take a 4-6 inch step at a gentle pace. First time users of the VersaClimber have a tendency to climb too fast and to take too long a step. Until users become thoroughly familiar with the VersaClimber, it is important to take short, slow steps. To maintain a shock and trauma free motion, it is mandatory not to "bottom out" or impact the pedals at the end of each stroke.

### SELECTING EXERCISE TIME

If you are not already warmed up, a warm up period of at least 5 to 10 minutes should be included in each VersaClimber workout. Taking a short step at a slow climbing speed during the warm up period is the key to a great workout. The first time user can easily climb for 15 to 20 minutes by including a slow 5 minute warm up and a 3 to 5 minute cool down period. With repetitive use it is possible to build up to longer climbs at higher speeds.

Many individuals enjoy 60 minutes or more of uninterrupted climbing. After each workout, note exercise time, climbing speed and height climbed for establishing a goal for future sessions. Use heart rate and perceived exertion to determine if you are at a comfortable exercise level. Remember that work intensity and calorie burn rate is based on climbing speed. If the exercise is too hard, slow down.

### CALORIE BURN RATE

Full body climbing ranks highest in calories burned even though climbing speed is slower than other activities. First time users often try to maintain the speed they use in other activities and tend to over exert themselves. New to cardio climbing, It is important to remember that because VersaClimbing is a total body climb against gravity, it is not necessary to climb at a high rate of speed, just take it slow.

## CALORIES BURNED ACTIVITY (150lb person)

Speed	Calories Burned Per Hour
3.0	228
9.4	384
2.0	486
7.5	792
1.9	864
0.9	972
	3.0 9.4 2.0 7.5 1.9

#### NOTE:

TO MAINTAIN TRAUMA FREE MOTION, IT IS MANDATORY THAT YOU DO NOT, UNDER ANY CIRCUMSTANCES, "BOTTOM OUT" AT THE END OF EACH STROKE. ALSO, DO NOT HIT THE STEP HEIGHT LIMITERS WHEN THEY ARE IN USE.

#### STAIR STEPPING

The SM-M features a 1-20 inch step height. This range of motion provides the ability to perform variable height and variable speed stair stepping exercises for the lower body only. The hand rails, located about waist high, are used to grasp and thus stabilize the upper body while stepping with the legs only. The upper body is maintained in an erect stationary position while the legs and hips perform a lower body stepping exercise. The foot straps also allow the user to perform a leg lift exercise while stepping, not available on single purpose steppers / stepping machines.



By holding the hand rails in front of you or to the side of your body and stepping with legs only, the buttocks, front and back of the thighs, calves, and shins can achieve a complete lower body aerobic and strength workout. Stair stepping is recommended for beginners before they attempt a full body climbing exercise and can be performed in any mode of operation.

### NOTE

WHEN HOLDING THE SIDE HANDRAILS KEEP FINGERS AND THUMBS ON THE FOAM PADDING OF THE HANDRAILS. DO NOT GRASP OR EXTEND ANY PORTION OF THE HAND BEYOND THE FLANGES OF THE MOVING HAND GRIPS. DO NOT HOLD ONTO THE MAIN VERTICAL POST.

## WARNING NOTICE

In order to maintain highest safety level of equipment, a regular examination is required for damage and wear. This requires a visual inspection of connectors, cables, chains, sprockets, pedals, handles etc. on a regular basis.



IMMEDIATELY DISCONTINUE THIS EXERCISE IF THERE IS ANY DISCOMFORT, SHORTNESS OF BREATH OR DIZZINESS.



NOTE:
DO NOT DISASSEMBLE COMPONENTS
WITH MAGNETS.

## QUICK START

Push QUICK START and begin your workout. Time, Rate, Distance, Step Height and other information is displayed. See page 6 for detailed display functions including Heart Rate and Calories

Begin climbing by taking a very short step stroke length of approximately 5 inches at a speed of 20 feet per minute for approximately 5 minutes. After 5 minutes the step height and climbing speed can be gradually increased if desired

To maintain a shock and trauma free motion, do not, under any circumstances, "bottom out" at the end of each stroke.

## CAUTION:

IMMEDIATELY DISCONTINUE THIS OR ANY EXERCISE IF THERE IS ANY DISCOMFORT, SHORTNESS OF BREATH OR DIZZINESS.

## MODULE DISPLAY

The control module consists of 17 push buttons with associated back lit text descriptors, a 32 character LCD display. The text descriptors are back lit descriptions of what function or activity is currently associated to each button. Here is a brief discussion of the functions provided by each instruction.



NOTE: Display module does not need to be unplugged; it is perfectly fine to keepmodule luminated 24 hours a day.

### YELLOW QUICK START BUTTON

When pressed, it clears the display of any previous information.

### SELECT AN OPPONENT

Press YELLOW QUICK START button, then press blue SELECT OPPONENT button repeatedly to select one of 6 virtual opponents to race against.

Then press LOCK SELECT. Next, select ENTER TIME use yellow arrow keys up/down then press LOCK SELECT button. Start climbing.

## VIRTUAL OPPONENT

The opponent you select will climb at the average speed listed below. If you are not able to keep up with the opponent you selected, slow down and finish the 15 minute race. Select a slower opponent for the next workout.

	SPEED FEET/MIN	DISTANCE FEET
1. BEGINNER	35	525
2. INTERMEDIATE	65	975
3. COMPETITOR	95	1425
4. CHAMPION	120	1800
5. ELIMINATOR	160	2400
6. OLYMPIAN	200	3000

### SELECT A VIRTUAL LANDMARK

Press this button repeatedly to select one of six Landmark goals. Then press the LOCK SELECT button to start. This is a distance challenge. You climb at your own desired speed.

LANDMARK	<b>HEIGHT</b>
1. Washington Monument	554 FT
2. Eiffel Tower	984 FT
3. Moscow Tower	1,762 FT
4. El Capitan	3,297 FT
5. Vesuvius	3,900 FT
6. Mount Olympus	9,731 FT

Select a landmark based on the total distance climbed during previous workouts.

### ENTER WEIGHT

Press this button to enter your weight which is used to calculate caloric burn rate. Use the yellow LOCK SELECT arrows to raise or lower your weight in the display until it matches your weight within plus or minus five pounds (or two kilograms). Then press the LOCK SELECTION button to enter your weight into the module.

#### **ENTERING TIME**

Press this button to increase or decrease the default workout period of 15 minutes. Use the yellow LOCK SELECTION arrows to raise or lower the number in the display until the desired time is displayed. Then press the LOCK SELECTION button to enter your time into the module display.

## LOCK SELECTION

Press this button to enter user selected values into the module

## YELLOW LOCK SELECTION ARROWS

These buttons are used to raise or lower the number in the display.

## "Upper" Left SELECT button.

Press this button to switch the display between ELAPSED TIME and TIME REMAINING in the workout period. The remaining time display stops at zero while the elapsed time continues counting up to 99 hours :59 minutes :59 seconds.

## "Center" SELECT button.

Press this button to switch between TOTAL CALORIES and CALORIES PER HOUR.

"Upper" Right SELECT button.

If the machine is not running in one of the specialty modes (Opponent, Landmark, Heart Rate Monitor) this button has no function as both STROKE LENGTH and DISTANCE PER MINUTE will be displayed continuously. When any of the specialty modes are selected, this button will switch the display between STROKE LENGTH and DISTANCE PER MINUTE

#### "Lower" Left SELECT button.

Press this button to switch between metric and imperial display units.

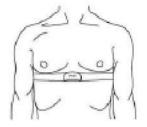
"Lower" Right SELECT button. Press this button to switch between OPPONENT'S TOTAL DISTANCE and OPPONENT'S DISTANCE PER MINUTE. This button is only active when virtual opponent mode is selected.

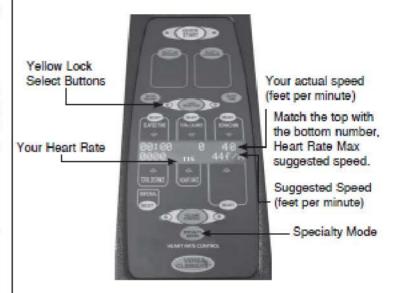
## SPECIALTY MODES HEART RATE MONITORING

Press this button to select HEART RATE MONITORING MODE. Polar chest strap must be worn.



Polar Chest Strap
Place adjustable strap direcetly
below pectoral muscle >





- 1. Press Quick Start
- Press Specialty Mode
- Using yellow lock selection buttons, enter target Heart Rate--(see chart on page 5)
- Press Lock SELECT BUTTON when complete.
- Climb at suggested speed (feet/per minute) as shown in the lower right hand corner.
- Match your actual feet/per minute (upper right hand corner) with the suggested speed.
- Every :30 seconds target feet/per minute will be updated.
- 8. In 5 minutes, you will be at target heart rate.

## CAUTION

IMMEDIATELY DISCONTINUE THIS EXERCISE
IF THERE IS ANY DISCOMFORT, SHORTNESS
OF BREATH OR DIZZINESS.

## SRM-Magnetic Resistance

VersaClimber uses efficient magnetic resistance system. This form of resistance is created by using eddy currents which is created by magnetics passing over a metal flywheel. The disc passes through the magnetic field causing non-friction resistance. Since surfaces never physically touch one another, the result is quiet, smooth, zero maintenance form of adjustable resistance.

## USING MAGNETIC RESISTANCE

Beginners and individuals who are deconditioned may use the resistance to control their climbing speed --by slowing the step speed down. The Magnetic control knob is located at the bottom of the display.

You can use resistance in two ways:

SLOWER STEP: Turn knob clock wise

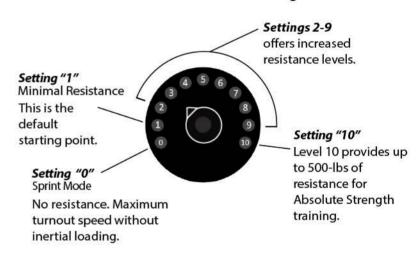
FASTER STEP: Turn knob counter clock wise



By turning the control knob "clock wise" will slow down the stepping speed when only your body weight is applied. However, by forcing the push and pull motion will create a harder work out. Beginners use the increased resistance to slow the stepping speed with out forcing the step down. This will produce a comfortable, less intense workout.

You can create "zero" resistance workout by turning the knob all the way "counter clock wise". However, by eliminating the tension the speed by which you climb is also increased: more steps in same amount of time. Beginners should take short (4-6 inch) slow paced steps in order to maintain an easy going climb rate. Conversely, if a more intense work out is desired, step faster with longer stride.

## 11 Preset Resistance Settings



Resistance ranges from 0 - 10. By default it starts at Level 1. Level 0 can be selected by turning the resistnace knob counter clockwise. At any time, quickly return to Level 1 by pushing the center button of the resistance knob.



## PHYSICAL SIZE

7'10" Height **Footprint** 43" x 46" 155 lbs Weight

**FUNCTIONAL FEATURES** 

0-20" Pedal Step Height Arm Stroke Length 0-20"

Climb Angle 75 Degrees Vertical Lift Factor (% slope) 96.6 Percent

MAGNETIC RESISTANCE

Magnetic Force Max Up to 500 lbs

Number of Settings 11

**Exercise Time** 

**USER ACCOMMODATIONS** 

4'2" - 7'1"

0 - 99.9 hours

Climber's Height 65 lbs - 352 lbs. Climber's Weight

**MODULE DISPLAY FUNCTIONS** 

**Exercise Rate** 0 - 500 FT/min 0 - 99,999 FT **Exercise Distance** Step Height 0 - 20 inches Race against opponent 35 - 200 FT/min **Heart Rate Display** 30 - 235 (BPM)

0-9,999 Calorie Burn Rate

**Display Units** Imperial / Metrics

**Power Supply** 110 Volt AC

#### ELECTRICAL

Two 5.5 x 2.1 mm female barrel type electrical power connectors are available on the back side of the post. One just above the lower brace, the other just below the top plastic cover.

Never connect two power supplies at the same time.

Connector's center termial is +12 Volts, outer terminal is 12 Volt return.

Power required is 1.1 Amps.

AC power cord should match local receptacle type (US, UK, China, Australia, Spain etc.)

Included power supply output is rated at 12 volts DC at 5 amps. Input is 90-250 Volts AC, 50-60Hz.

It is suggested to disconnect power from the wall outlet when not in use.



NOTE: DO NOT DISASSEMBLE COMPONENTS WITH MAGNETS.

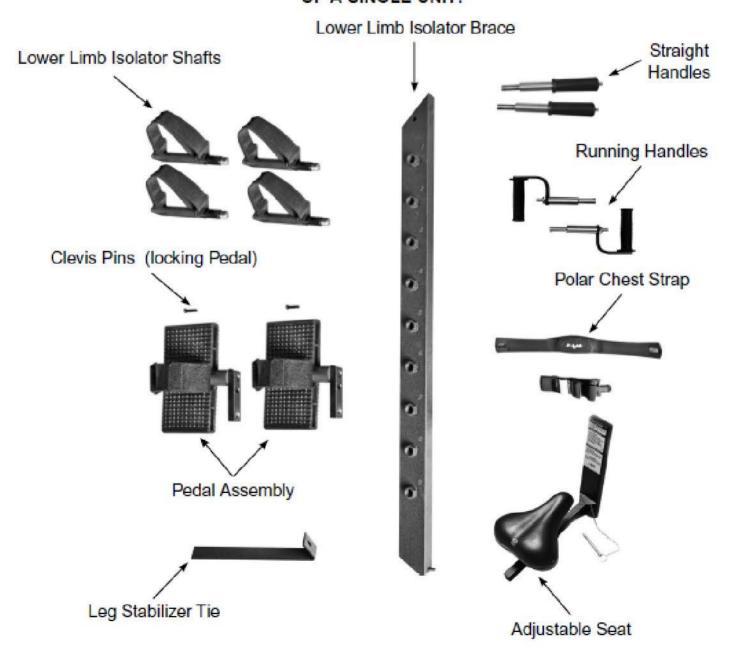


## TOOLS REQUIRED FOR ASSEMBLY OF A SINGLE UNIT:

- A. -One Phillips screw driver
- B. Two 9/16" wrenches
- C. 3/4" open wrench or crescent wrench
- D. Two able bodied persons are required for assembly

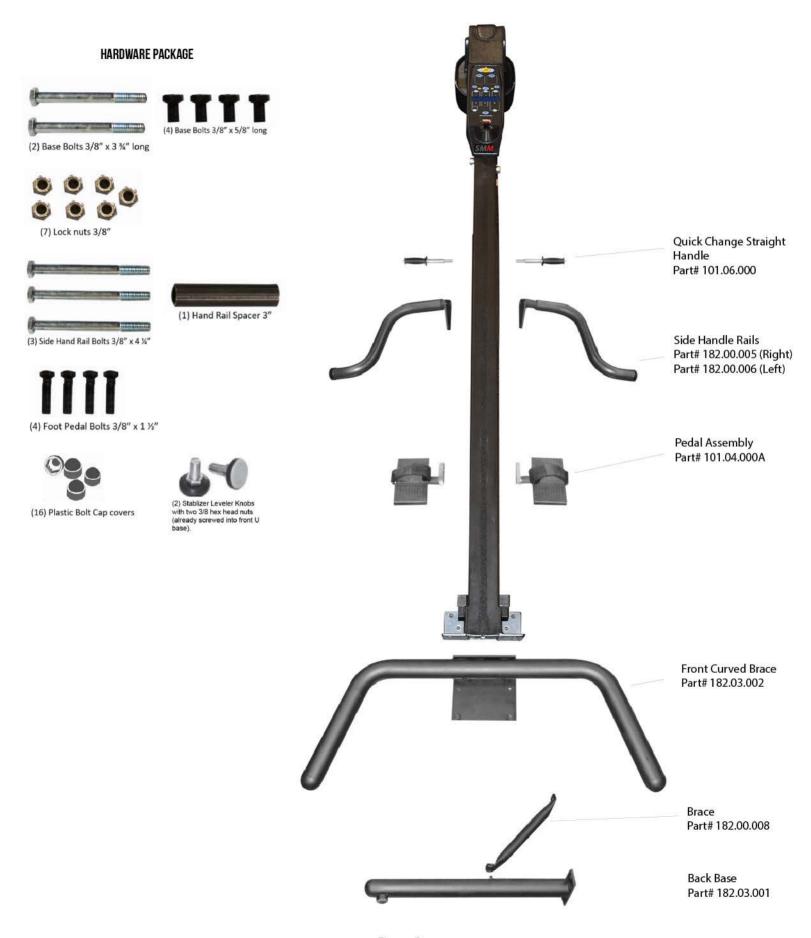


## PARTS FOR ASSEMBLY OF A SINGLE UNIT:



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## SRM-M PART IDENTIFICATION



Page 8

## UNPACKING / ASSEMBLY

1. After removing the crate cover, remove the wooden cross support that holds the main post down with Philips head screw driver.

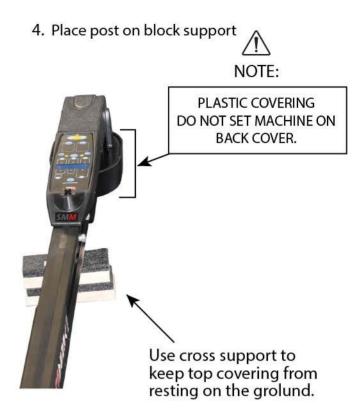


2. Next, remove the (2) bolts at the end of crate with two 9/16 wrenches.



3. Using two people, carefully remove the main VersaClimber post from shipping crate.





Avoid lifting the machine by or setting the machine on any portion of the black plastic covering located at the top of post.

## NOTE:

We recommend replacing PEDAL SHAFT every three years.

## FRONT U BASE STABILIZER INSTRUCTIONS (When attaching the front curved floor base)

Two Stabilizer Knobs for U Base.



Locate the threaded inserts on the underside of the front U base at the sections that curve.



Screw in stabilizers in both threaded holes on front base.



Make sure to screw the stabilizer all the way down into the threaded hole, as seen above.



Front base with stabilizer knobs attached.



Front base with stabilizer attached, when your VersaClimber is completely assembled and placed where it will be used, you can now adjust the stabilizer knobs down.



Screw down knobs until pads are touching the floor or just resting on floor.



8. Once both knobs are set into position, spin the hex nut up until secured at the bottom of the front base tube then tighten firmly with a 9/16" open wrench, to lock stabilizer in place.



9. Attach the front curved tubular floor brace to the post. Align 4 holes curved brace with 4 post base holes. Using four (4) self tightening hex head bolts 3/8" x 5/8" long bolts, screw down until firmly tight. Torque wrench setting is 40 lbs.



10. From top of plate, screw in (4) self tightening 3/8" x 5/8" base bolts. Securely TIGHTEN all (4) base bolts. Torque wrench setting is 40 lbs.



11. Attach smaller brace and back base tubular floor brace together with 3/8" lock nut. DO NOT FULLY TIGHTEN NUT AT THIS TIME.

12. Using two people lift and hold Versa Climber in upright postion.



13. Attach tubular brace between post and back tubular curved floor base with (2) 3/8" x 3<sup>3/4</sup>" bolts. DO NOT FULLY TIGHTEN.



14. After tubular brace is in place, go back and FULLY TIGHTEN the two 3 3/4" long base bolts. Torque wrench setting is 40 lbs.



15. Then go back and TIGHTEN FULLY the TOP lock nut on the tubular brace.
Torque wrench setting is 20 lbs.



16. Next, TIGHTEN the BOTTOM lock nut and the back brace to complete the post assembly. Torque wrench setting is 20 lbs.



17. Attach foot pedals with mount bracket in the shape of "L" ensuring (2) 3/8" x 11/2" bolts are above pedal.



18. Securely TIGHTEN foot pedals with 9/16" wrench.

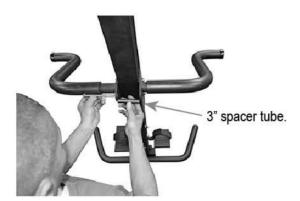
**NOTE:** It is recommended to visually inspect foot pedals and tighten bolts every (2) two months and replace pedal shaft every three years.



19. Bring padded side hand rails together align with 2 post holes.



20. Using 2 of the 3 long bolts, join the left and right hand rails. Loosely attach two 3/8 nuts nearest to the inside center of main VersaClimber post.



For the 3rd bolt, make sure to Insert 3" long spacer tube and fully tighten ALL 3 bolts and nuts with two 9/16 wrenches.

Torque wrench setting is 20 lbs.

Next place the bottom of the lower leg isolator in the bracket as shown below and secure with 3/8 nut.



Place leg isolator brace into position and secure with 2.5" bolt, washers and nut.



Slide the isolator tie under the back base as shown above.



Thread velcro isolator shaft into lower leg brace, screwing in clockwise.

Optional: Locking Foot Flexion Clevis pin.





Limited range of plantar and dorsi-flexion, a locking pin in the foot pedal limits the range of motion of the ankle to 15 degrees while pedaling, stepping, or climbing. Removal of the pin allows full flexion of the ankle.

Velcro isolator bars.





With 3/4" wrench, tighten down velcro isolator bars.



Install straight handgrips by depressing pin with thumb and insert.



Install running handgrips by depressing pin with thumb and insert.



Apply seat bracket to post in desired position. Insert pull pin through frame and seat bracket.



## - WARNING NOTICE -

In order to maintain highest safety level of equipment, a regular examination is required for damage and wear. A visual inspection of connectors, cables, chains, pulleys etc. is required on a regular basis.

## NOTE:

Replace defective components immediately and / or keep equipment out of use until repair is made.

<sup>\*</sup>These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, or cure any disease. Benefits listed are based on research that may or may not be independent of Heart Rate Inc. products.

## SETTING UP SEAT AND LOWER LIMB ISOLATOR



Mounting seat bracket assembly to post.



Placing pull pin and connecting seat bracket assembly to post.



Patient is seated and holding the hand rails.



With adjustable wrench, position the isolator to comfortably accommodate the foot.

Practitioner has located the correct position for patient leg length.



Patient is seated and safely on climber, foot is placed into adjustable leg isolator and safely secured.



Patient is in seated position with leg in isolator. Patient is doing a lower body workout with hands on hand rail assembly.



Full weight bearing. Patient is up right in climbing position with seat bracket assembly for support if needed.



Patient is seated and safely on climber, foot is placed

#### **MAINTENANCE INSTRUCTIONS**

There are rollers and slide bearings made from high pressure application moly-disulfide filled nylon on each oscillating bar. The roller bearings are held on with 3/8" shafts and press-on grip rings. The slide bearings are held in place with two 3/8" pins. The slide bearings have lubrication points. This bearing material is expected to be maintenance free for years. The bearings are lightly lubricated at the factory and the wear life and smooth operation of the machine can be assured by lubricating every two months or sooner if required. Lubricate with any good quality synthetic lubricant we recommend:

Planet Safe Lubricant | www. planetsafelubricant.com

First, wipe any excess oil, lint, dirt, etc. from all internal accessible surfaces of the retangular tubing.

Move the bars up and down to allow access to clean the two foot pedal slots and the two hand grip slots.

Use paint thinner to remove any oil and lint residue.

When clean, wipe or spray on all 4 internal surfaces of the retangular tubing.

### DAILY:

Wipe down the main post, base and side rails with a rag and non-solvent, non-ammonia cleaning solution.

### WEEKLY:

Hand check quick-release handle bushings, which the handles lock into on both sides to make sure they are tight.

## MONTHLY:

Inspect and check the bottom chain tightness. For questions regarding this adjustment procedure please contact our service department. 800.237.2271 x226 or email: support@versaclimber.com

### WARNING NOTICE

In order to maintain highest safety level of equipment, a regular examination is required for damage and wear. This requires a visual inspection of connectors, cables, chains, sprockets, pedals, handles etc. on a regular basis.



IN ORDER TO MAINTAIN HIGHEST LEVEL OF EQUIPMENT, A REGULAR EXAMINATION IS REQUIRED FOR DAMAGE AND WEAR. THIS REQUIRES A VISUAL INSPECTION OF CONNECTORS, CABLES, CHAINS, SPROCKETS, FOOT PEDALS, HANDLES ETC. ON A REGULAR BASIS.

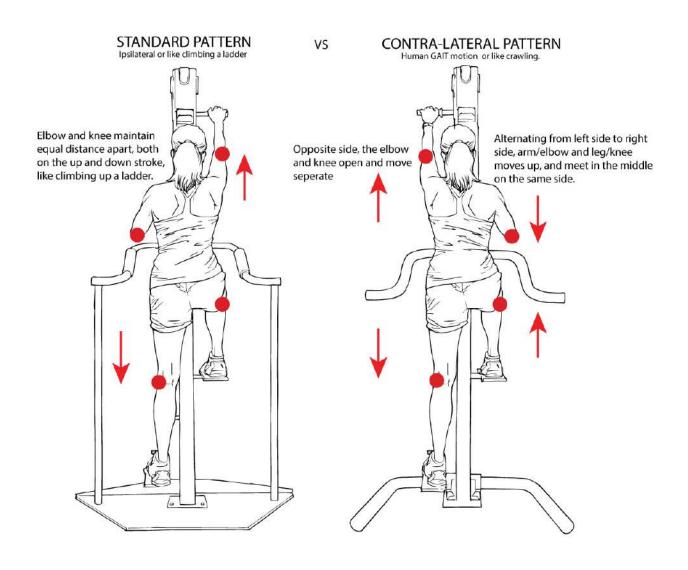
#### NOTICE

REPLACE DEFECTIVE COMPONENTS IMMEDIATELY AND/OR KEEP EQUIPMENT OUT OF USE UNITL REPAIR IS MADE.

## CONTRA LATERAL MOVEMENT PATTERN or "RUNNING MOTION"

The SRM-M VersaClimber comes with contra lateral movement pattern. This beneficial "running motion" or "primal movement" provides a unique alternative to the standard "climb pattern".

A running motion is produced as the arm and leg approach each other on one side of body while the opposite arm and leg seperate on the other side.



## **NOTE:**

TO MAINTAIN TRAUMA FREE MOTION, IT IS MANDATORY THAT YOU DO NOT, UNDER ANY CIRCUMSTANCES "BOTTOM OUT" AT THE END OF EACH STROKE. ALSO, DO NOT HIT THE STEP HEIGHT LIMITERS WHEN THAT ARE IN USE.

## APPLICATIONS FOR THE SPORT REHAB VERSACLIMBER

## NEW EXERCISE MODALITY FOR REHABILITATION AND CONDITIONING

The Sport Rehab Model (SRM) VersaClimber® is a total body, closed chain, rehabilitation exercise machine. It utilizes one of the most natural and intensity selective muscular activities to which the body can be subjected. Total body vertical climbing exercise and rehabilitation routines have been developed to provide a continuous arm and leg action in a seated or standing position, using a wide selection of stroke lengths, stroke rates, and resistance levels.







NON WEIGHT BEARING, PARTIAL WEIGHT BEARING AND FULL WEIGHT BEARING ACTIVITY PROVIDES 3 LEVELS OF REHABILITATION FOR THE ORTHOPEDICALLY IMPAIRED

For the orthopedic impaired patient or athlete, three levels of closed chain VersaClimber rehabilitation are available for use during all phases of patient rehab. The three levels consist of non-weight bearing, partial weight bearing and full weight bearing exercises. Phase 1 is for patients who need to eliminate one or more extremities



from the exercise to be performed. The patient exercises in a non-weight bearing seated position, while supporting the stationary lower injured limb with the leg isolator, or not using the limb in the case of an upper body extremity. While seated, pushing and pulling with the arms and / or legs in any combination elicits a non-weight bearing conditioning response to exercise. Phase 2 allows a partial weight bearing activity by also utilizing the seat. Exercise at this level involves all four or any combination of the extremities while the person's body weight is partially supported by the seat. The reduced orthopedic loading allows for involved or weakened extremities to be safely exercised either actively by Continuous Active Motion (CAM) or passively by Continuous Passive Motion (CPM). Partial weight bearing may be elicited in the legs and/or lower back in the standing

position by supporting the upper body with the arms when stepping. Phase 3 is for patients that can bear full weight in the stepping or climbing position. The seat may remain in place while stepping or climbing to partially support body weight or to allow for seated rest intervals for fatigued patients.

One of the greatest areas of orthopedic application of the VersaClimber arises when it is integrated into a full body (75o angle) treatment plan. Leg and extremity injuries that prevent walking or running do not have to limit climbing. The patient does not have to counteract impacting, gravitational or mechanically produced forces. All continuous active and passive movements are smooth, impact free, rhythmic and symmetrical thereby decreasing the incidence of repeated assault to the affected limb or extremities via orthopedic overload. Acute and chronic leg, knee, arm, chest, shoulder and back injuries can be safely exercised on the SRM VersaClimber without risk of exacerbation of the injury site.

## AMBULATORY PATIENTS CAN CLIMB

By utilizing the lower limb isolator, patients with pathology involving the total immobilization of one or more limbs can be exercised at pre-injury levels effectively and safely. Exercise on the VersaClimber is recommended for any injury that requires a zero or controlled range of flexion of the hip, knee or ankle joints, or the controlled contraction of any muscle or stretching of any ligament during flexion of the hip, knee, or ankle. This is facilitated through the use of orthopedic travel limiters built into the VersaClimber at two inch increments to control the angle of deflection on one or both lower extremities.

By placing the heal of the injured leg on the foot pedal, it is possible to climb normally without aggravation of the toe, ball of foot, ankle, achilles or calf injuries. As a result, those patients who traditionally were unable to walk, run or exercise as a part of the rehabilitative regimen, can now vigorously maintain muscular and cardiovascular fitness, increase functional capacity and overall strength, thus facilitating a rapid return to activity or sport.

## UPPER BODY INJURIES

The arms, chest, shoulders and back can be totally or partially immobilized while pedaling, stepping or climbing by placing one or both hands on the stationary hand rails. If upper body limb motion is desirable without active muscle contraction, the injured arm can be placed on the moving hand grip and subjected to CPM. A full range of CAM can be achieved with the remaining healthy limbs even if the upper body injury requires complete removal from the activity.

## CONTROLLED RANGE OF MOTION

The range of motion can be controlled for upper and lower limbs, on one or both sides of the body, while seated, stepping or climbing. The range of motion limiters built into the VersaClimber, are adjustable in 2 inch increments of motion. This provides a full range of angles of deflection of the knee and hip joint from zero degrees to the maximum deflection attained at a 20 inch step. To effectively exercise a patient on the VersaClimber utilizing the limiters, place the foot of the injured leg on the bottom or lower pedal. Then place the uninjured foot on the higher pedal. Have the patient step up onto the VersaClimber, grasping the stationary hand rails for support. When the feet are level, adjust the moving hand grips to chin height. Then set the range of motion limiters to zero inches of motion, for no deflection of the injured leg, by screwing the limiter into the appropriate hole. The patient is now ready to climb. One leg will be free to take a 1 inch through a 20 inch step as desired, while the injured leg is restricted to zero degrees of deflection at the knee and hip joint. Although the afflicted limb is moving up and down, it is not subjected to any trauma, muscle contraction or exacerbation. The arms and uninjured leg are being utilized in an alternating push-pull motion that is specific to the VersaClimber, thus facilitating balanced concentric/eccentric contractions to the anterior and posterior musculature. Exercise at relatively slow repetition rates can illicit low to maximal heart rates and a strengthening of major muscle groups in the trunk and the three healthy flexing extremities.

Similarly, the range of motion of the shoulder and elbow joint can be totally isolated or controlled in 2 inch increments of motion with the range of motion limiters.

For injuries requiring a limited range of plantar and dorsi-flexion, a locking pin in the foot pedal limits the range of motion of the ankle to 15° while pedaling, stepping or climbing. Removal of the pin allows full flexion of the ankle.

## WORK INTENSITY IS CONTROLLED USING HEART RATE MONITORING DURING EXERCISE

The VersaClimber features an integrated Polar compatible heart rate monitoring system. This computerized biofeedback heart rate control allows clinicians to accommodate even the most dysfunctional and or de-conditioned patients. According to the American College of Sports Medicine standard conversion of VO2 max., low level cardiac patients with a 2 MET level functional capacity can begin exercising on the VersaClimber by pedaling in the seated position.

Obese patients and others such as diabetics may not be able to perform some of the simplest, common exercises. Others may not be able to exercise on bikes, treadmills, steppers, etc. because of body weight, orthopedic or girth restrictions. [Heart Rate Monitor] option allows a variety of patients to exercise on the VersaClimber at their appropriate, prudent target heart rate which is programmed into the computer by utilizing the heart rate control mode. This mode of operation will monitor and modify the workout intensity at 30 second intervals, to keep the heart rate at predetermined levels.

## SELECTABLE RANGE OF MOTION, STEP RATES AND RESISTANCE TO MOTION

For the average population, the step height and step rate is determined by the person climbing. The hydraulic resistance to motion of the arms and the legs is selected on the control panel. By shifting body weight from one leg to the other, a step height and step rate can be selected that suits the fitness level of the person climbing. Step heights can be selected simply by stepping at any height desired. The step rate can also be easily selected by stepping fast or stepping at a decreased rate. Rates can be as slow as 1 step in 3 seconds, up to as fast as the person is capable of moving, without machine restrictions. Because of the wide range of controlled flexion and extension of the extremities, the VersaClimber can be used effectively at any level of physical fitness from sedentary de-conditioned cardiac patients to elite world class athletes.

## REHABILITATION OF PHYSICALLY IMPAIRED PATIENTS ON THE VERSACLIMBER

SEATED POSITION ON THE VERSACLIMBER PROVIDES CONTROLLED LEG EXERCISE FOR SPINAL CORD INJURED, STROKE, AND NEUROLOGICALLY IMPAIRED PATIENTS.

The addition of a new padded seat to the VersaClimber allows accessibility by spinal cord injured patients/athletes, cardiac, neurologically impaired, and amputees. The seat affixed to the VersaClimber frame is vertically and horizontally adjustable for maximum comfort. The addition of the seat will not prevent or hinder normal total body climbing movement, nor detract from any of the program options available on the VersaClimber. The adjustable seat is an important tool for those clinics, hospitals, physical therapy centers, or gyms requiring more dynamic full body exercise for their disabled or low functioning patients.

## SEATED POSITION ON THE VERSACLIMBER ALLOWS PATIENTS TO MOVE THEIR LEGS BY PUSHING OR PULLING WITH THEIR ARMS, MOVE THEIR ARMS BY PUSHING OR PULLING WITH THEIR LEGS OR ANY COMBINATION IN BETWEEN.

Amputees and Spinal Cord injured patients may exercise by using the seat to support either their entire body weight or any portion that they cannot support with their legs. While seated, pushing and pulling with the arms causes a continuous passive motion (CPM). Those patients with some lower extremity capability can also push or pull with their legs to the extent that the injury allows. Range of motion travel stops are built into all orthopedic models. The travel stops limit the range of motion on one or both sides of the body in 2 inch increments. Patients with braces, casts, or limitations of body movement can use the limit stops under normal clinical supervision. They can exercise in a safe non-traumatic seated or standing posture without many of the contraindications inherent with traditional exercise modalities.







PHASE 2 PHASE 3

## CARDIAC, SPINAL CORD INJURY, AND DECONDITIONED PATIENTS CAN EXERCISE SAFELY USING ARMS AND LEGS AT LOW INTENSITY.

The seat, along with the Heart Rate Control (HRC)option presents the clinician with a variety of applications to accommodate even the most disabled or dysfunctional patient. Wheelchair patients that are capable of sitting erect in their chair and use their arms effectively, are capable with supervision, of exercising on the VersaClimber. Utilizing non weight bearing, seated upright posture, the patient is capable of facilitating a more efficient balanced workout utilizing the cross crawl or asynchronous movement available on the VersaClimber. The patient can control the CPM of injured limbs by the controlled active motion (CAM) of their healthy limbs. The supportive rails will allow some patients with transfer difficulties the ability to move safely up and onto the VersaClimber while others will need assistance. The use of the seat will enable deconditioned cardiac patients (phase II, and III) the ability to exercise arms only, legs only, or combinations of both without exceeding the appropriate heart rate range. The HRC option allows the patient to exercise in the appropriate prudent target heart rate which is programmed into the VersaClimber. This mode of operation will monitor and modify the workout rate in feet per minute, at 30 second intervals to adjust to changes in heart rate. The clinician can use the new seat, HRC option, and travel stops for a wide variety of patients.

<sup>\*</sup>These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, or cure any disease. Benefits listed are based on research that may or may not be independent of Heart Rate Inc. products.

## - WARNING NOTICE -

In order to maintain highest safety level of equipment, a regular examination is required for damage and wear. A visual inspection of connectors, cables, chains, pulleys etc. is required on a regular basis.

## NOTE:

Replace defective components immediately and / or keep equipment out of use until repair is made.

## STRENGTH INTERVAL TRAINING

Strength intervals are achieved in a similar manner to aerobic interval training, except the intervals are performed at a slow rate of motion. First, turn the hydraulic control knob located at the bottom of the console in the clockwise direction, to approximately 75% of the user's capability. Begin climbing, exerting a maximum effort by pushing and pulling with arms and legs in the upward and downward direction for 5 to 10 seconds or until muscles are almost fatigued and anaerobic threshold is met (not to exceed 85% of your predicted maximal heart rate). Be sure to use the foot straps to maximize the vertical lift. Hands may be in the forward or reverse grip position depending on the desired muscle groups to be worked. Recover from the interval by setting the hydraulic control to a minimum (counter-clockwise direction) and taking short, slow, 2 to 4 inch strokes until breathing is controlled and muscles have recovered. As previously mentioned, as you become better conditioned, the rest period between each interval will become shorter.

- Warm-up 10-15 minutes on the VersaClimber before beginning interval workouts.
- 2. Always stay within your target heart rate.
- 3. Continue climbing during the recovery periods.

## USING THE VERSACLIMBER WITH MINOR INJURIES

MOST MINOR INJURIES THAT PREVENT RUNNING, DO NOT PREVENT CLIMBING

You must always use common sense when exercising. If you have an injury that hurts when

you walk or run, it is common sense to stop walking or stop running. If the injury hurts while climbing, do it easier or do it slower. If it continues to hurt... stop! Consult with your doctor about any injury prior to engaging in an exercise program. Some leg, knee, arm, chest, shoulder and back injuries can be safely exercised on the VersaClimber by limiting the range of motion or isolating the motion of the injured body part on one or both sides of the body. The smooth, rhythmic, impact free motion will decrease the likeliness of further assault to the injured limb while maintaining or increasing cardiovascular and muscular fitness. The VersaClimber eliminates all pounding trauma and provides biofeedback information to the user to monitor step heights and step rates. It is ideal for controlled upper and lower body activity for fitness maintenance during the recovery phase of minor injuries.

## LEG INJURIES

The VersaClimber eliminates pounding and jarring of the joints and can therefore be used to exercise such injuries as hamstring pulls, knee injuries, shin splints, achilles pulls, turf toe, leg bruises and sprains. By controlling the rate of climb, the range of motion, and/or by repositioning the foot or feet on the pedal(s), specific areas of the leg and foot may be exercised passively.

## IMMOBILIZATION OF THE LOWER BODY

If the lower body must be completely immobilized due to injury, you can still strengthen your upper body and maintain cardiovascular fitness by doing an arms only workout on the VersaClimber. Stand on the base plate with one foot on each side of the post. Select or reposition the hand grips so that when one arm is outstretched it is fully extended. Alternate the pushing and pulling motion of the arms while the lower body remains still.

## SPARE PARTS LIST

In the event that a replacement part is ordered from the factory, please refer to the following spare parts list for the correct part description and part number. This information will expedite your shipment when calling our Service Department.

## **ELECTRONICS**

SM Module	015-06-00 MR
Tach Assembly, V765 (Bracket, PCB Assy, Cable)	015-12-000
Encoder Disc	013-01-004
Rotory Encoder	185-22-000
Key Pad	015-05-002AB
Tach Cable	015-15-000
Power Supply	60155

## **MOVING PARTS**

Foot Pedal Assembly	145-07-000 left
Foot Pedal Assembly	145-08-000 right
Foot Pedal Straps	008-03-000A
Foot Pedal Assembly	008-00-007A
Quick Change Handle (1)	101-06-000
Quick Change Running Handle (1)	101-03-000
Handle Grip Only	30009
Top Chain	038-00-000M
Bottom Chain	037-00-000
Bar Assy, Top	185-09-000
Bar Assy, Bottom	148-02-000
Slides	003-00-009
Rollers	003-00-005
Bottom Sprocket / Tension Assy	185-10-000
Arm Extender Bar Assembly	182-02-000
Bushing, Handle	101-00-010
Bottom Sprocket / Tension Assy	145-01-000
Seat Bracket	019-02-000

## MAGNETIC RESISTANCE

Magnetic Assembly	100 01 000
Madhetic Assembly	7
Magnetic Assembly	

#### STRUCTURAL

Base Assembly, (All parts)	182-03-000
Brace	182-00-008
Bumper Stopper	101-00-008
Post Assembly, SM	185-07-000
Back Base Support	182-03-001
Front Base Support	182-03-002
Rail Right Side	182-00-005
Rail Left Side	
Rail End Cap	30081
Rail Foam (32")	60046
Planet Safe Lubricant (16oz)	31112
Planet Safe Grease (0.25oz)	31114

## VERSACLIMBER LIMITED WARRANTY

Please visit:

https://versaclimber.com/warranty/



## **CLOSING COMMENTS**

This instruction manual, like any instruction manual, is not and cannot be 100% complete. Please contact us if you have any questions or comments after thoroughly reading this manual.

We always appreciate receiving input from users.



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