

ASUNA

ASUNA 4500 ROWING MACHINE





*Owner's Manual
Made in Taiwan*

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ATTENTION: Please verify that all parts associated with this product are in good condition and accounted for. During the assembly process please be sure to follow each step accordingly as it has been explained within the manual.

 **WARNING:** During assembly it is recommended that all bolts be tightened by hand, upon completing assembly, bolts should then be properly secured using the wrench provided. To avoid injury, check bolts carefully before use.

 **WARNING:** Do not plug into power supply until equipment has been fully assembled. Ensure that the power supply matches the specifications of the equipment : 120V.

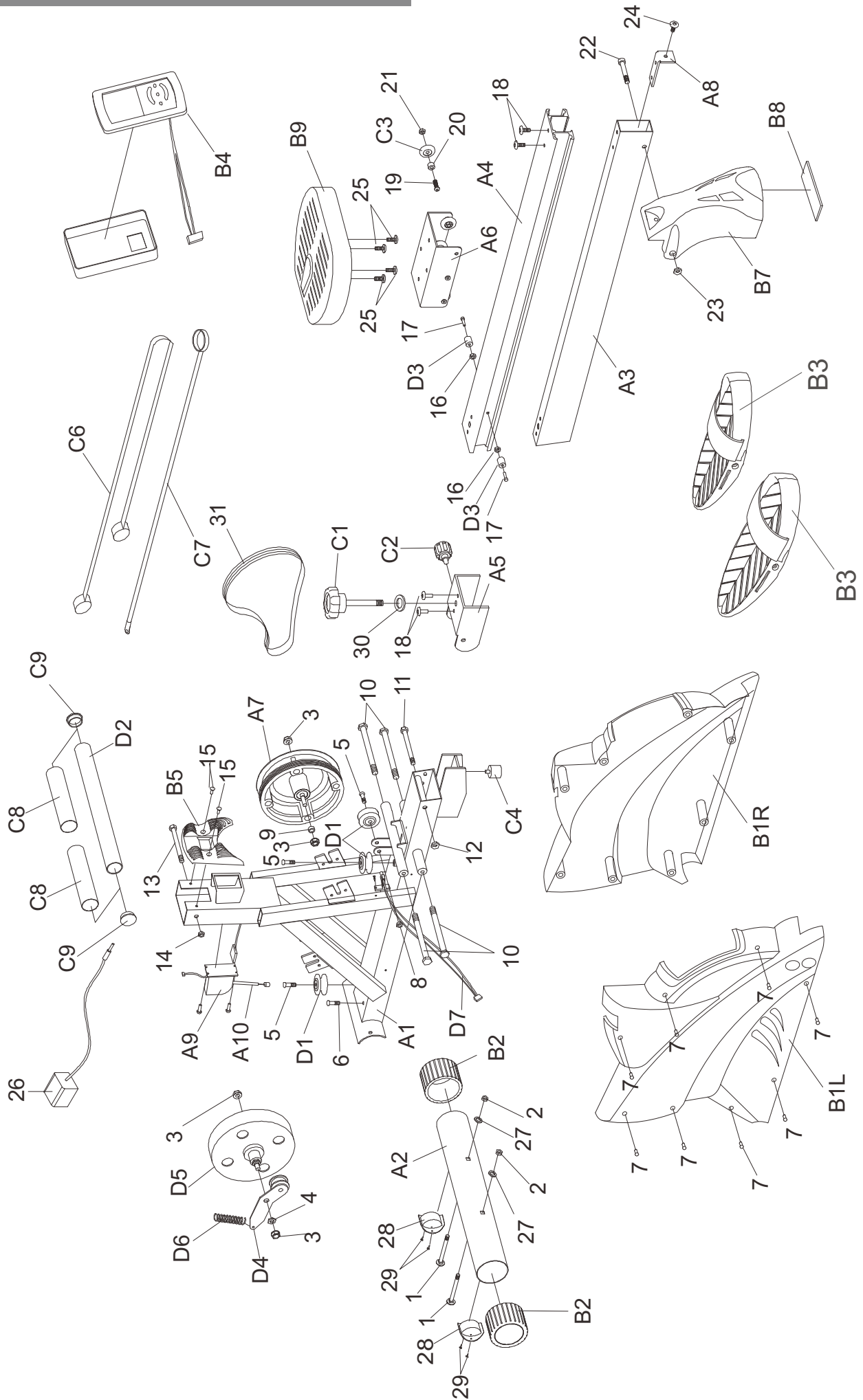
IMPORTANT: Read all instructions carefully before using this product. Retain owner's manual for future reference. For customer service, please contact: support@sunnyhealthfitness.com

IMPORTANT SAFETY INFORMATION

We thank you for choosing our product. To ensure your safety and health, please use this equipment correctly. It is important to read this entire manual before assembling and using the equipment. Safe and effective use can only be achieved if the equipment is assembled, maintained and used properly. It is your responsibility to ensure that all users of the equipment are informed of all warnings and precautions.

1. Before starting any exercise program, you should consult your physician to determine if you have any medical or physical conditions that could put your health and safety at risk, or prevent you from using the equipment properly. Your physician's advice is essential if you are taking medication that affects your heart rate, blood pressure or cholesterol level.
2. Be aware of your body's signals. Incorrect or excessive exercise can damage your health. Stop exercising if you experience any of the following symptoms: pain, tightness in your chest, irregular heartbeat, shortness of breath, lightheadedness, dizziness or feelings of nausea. If you do experience any of these conditions, you should consult your physician before continuing with your exercise program.
3. Keep children and pets away from the equipment. The equipment is designed for adult use only.
4. Use the equipment on a solid, flat level surface with a protective cover for your floor or carpet. To ensure safety, the equipment should have at least 2 feet (0.6 M) of free space all around it.
5. Ensure that all nuts and bolts are securely tightened before using the equipment. The safety of the equipment can only be maintained if it is regularly examined for damage and/or wear and tear.
6. Always use the equipment as indicated. If you find any defective components while assembling or checking the equipment, or if you hear any unusual noises coming from the equipment during exercise, discontinue use of the equipment immediately and do not use until the problem has been rectified.
7. Wear suitable clothing while using the equipment. Avoid wearing loose clothing that may become entangled in the equipment.
8. Do not place fingers or objects into the moving parts of the equipment.
9. The maximum weight capacity of this unit is 300 pounds (135 KG).
10. The equipment is not suitable for therapeutic use.
11. To avoid bodily injury and/or damage to the product or property, proper lifting and moving is required.
12. Your product is intended for use in cool, dry conditions. You should avoid storage in extreme cold, hot or damp areas as this may lead to corrosion and other related problems.
13. This equipment is designed for indoor and home use only, it is not intended for commercial use!

Exploded Drawing

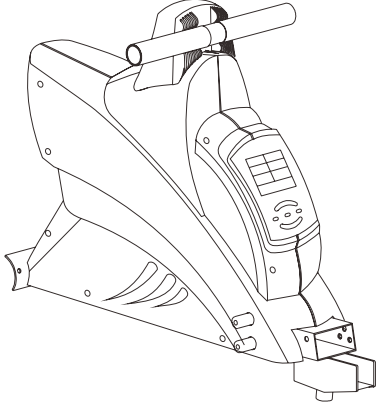

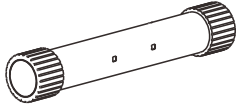

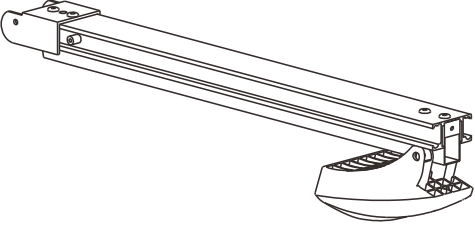
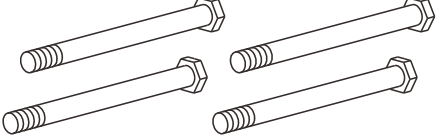


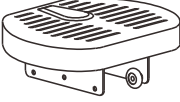

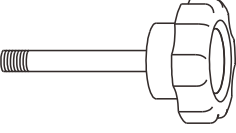

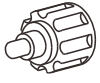


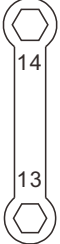

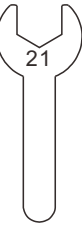

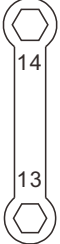

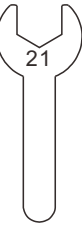

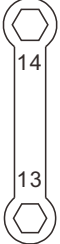

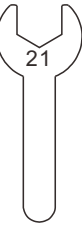


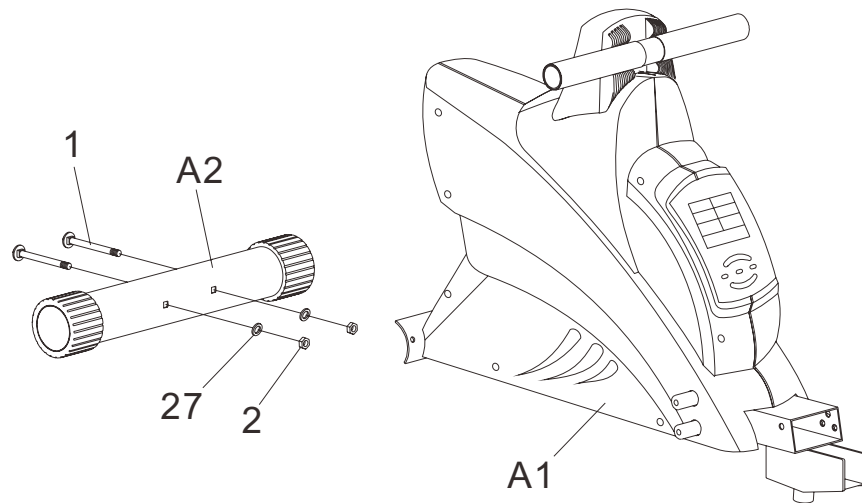
Parts List

No.	Description	Q'ty
A1	Main Frame	1
A2	Front Stabilizer	1
A3	Slide Rail (Steel Tube)	1
A4	Slide Rail (Aluminum Tube)	1
A5	Folding Bracket	1
A6	Seat Carrier	1
A7	Pulley	1
A8	L-shaped Bracket	1
A9	Motor	1
A10	Cable	1
B1-R	Chain Cover (right)	1
B1-L	Chain Cover (left)	1
B2	Foot Cap Ø76	2
B3	Pedal	2
B4	Computer	1
B5	PVC Cover	1
B7	Rear Fulcrum	1
B8	Rubber Pad	1
B9	Seat	1
C1	Knob	1
C2	Pop Pin	1
C3	PU Wheel Ø37	6
C4	Rubber Cushion	1
C6	Tension Strap	1
C7	Elastic Belt Ø10	1
C8	Sponge Ø35	2
C9	End Cap	2
D1	Plastic Pulley	3
D2	Handlebar	1
D3	Rubber Cushion	2
D4	Tension Pulley	1
D5	Magnetic Flywheel	1
D6	Spring	1
D7	Sensor Wire	1
T1	Allen Wrench x 6mm	1
T2	Spanner x #13 - #14	1

No.	Description	Q'ty
T3	Spanner x #14	1
T4	Spanner x #21	1
1	Carriage Bolt M8 x 90L	2
2	Dome Nut M8	2
3	Nut 3/8" x 26	4
4	Nut 3/8" x 3T	1
5	Screw M8 x 35L	3
6	Screw M8 x 30L	1
7	Tapping Screw M4 x 16	8
8	Nut M8	1
9	Nut 3/8" x 4T	1
10	Shaft 1/2"	4
11	Bolt 3/8" x 120L	1
12	Nylon Nut 3/8"	1
13	Bolt 3/8" x 105L	1
14	Nut x 7T 3/8"	1
15	Bolt M5 x 0.8 x 15L	2
16	Nut M6	2
17	Screw M6 x 25L	2
18	Screw M8 x 25L	4
19	Bolt M8 x 25L	6
20	Spacer Ø12.5 x Ø8.2 x 10L	6
21	Nut M8	6
22	Bolt 3/8" x 90L	1
23	Nut 3/8"	1
24	Screw M8 x 40L	1
25	Screw M8 x 12L	4
26	Adapter	1
27	Flat Washer M8 x Ø16	2
28	Plastic Wheel	2
29	Screw M4 x 16	4
30	Flat Washer Ø13 x Ø25	1
31	Belt	1

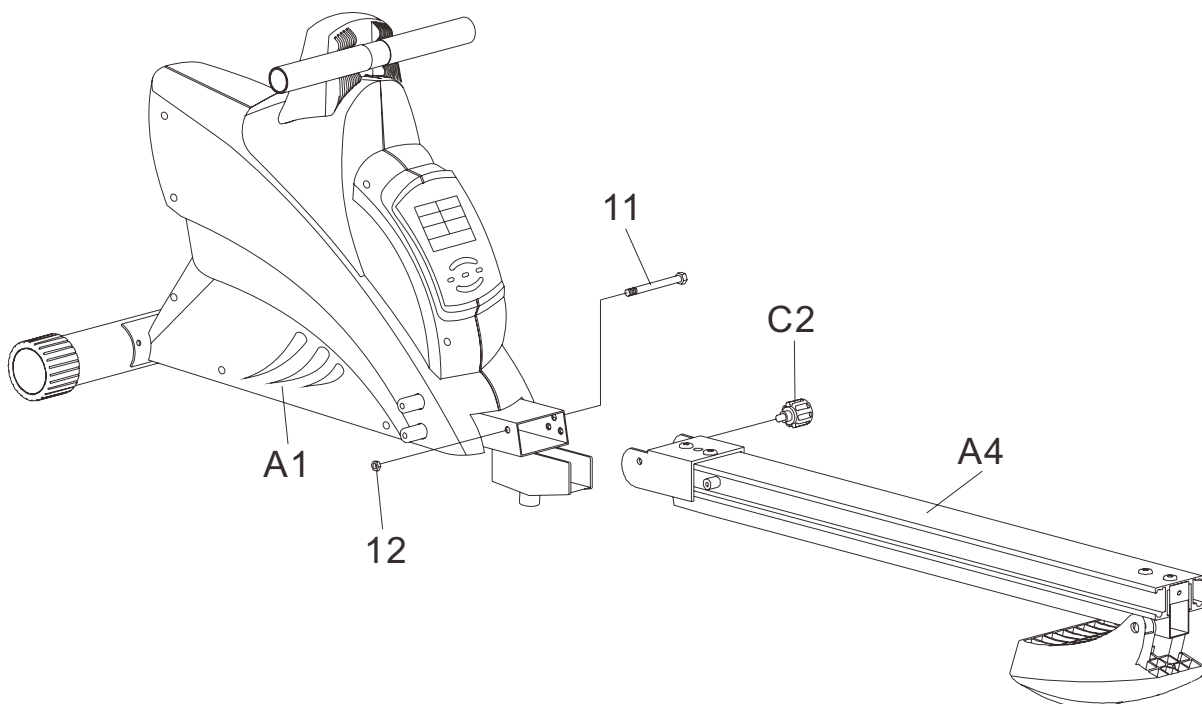
Assembly Parts List

<p>#A1 Main Frame - 1 set</p> 	<p>#1 Carriage Bolt M8 x 90L - 2 pcs</p> 												
<p>#A2 Front Stabilizer - 1 set</p> 	<p>#2 Dome Nut M8 - 2 pcs</p> 												
<p>#A4 Slide Rail - 1 set</p> 	<p>#10 Shaft 1/2" - 4 pcs</p> 												
<p>#B3 Pedal - 2 pcs</p> 	<p>#11 Bolt 3/8" x 120L - 1 pc</p> 												
<p>#B9 Seat - 1 set</p> 	<p>#12 Nylon Nut 3/8" - 1 pc</p> 												
<p>#C1 Knob - 1 pc</p> 	<p>#27 Flat Washer Ø8 x Ø16 - 2 pcs</p> 												
<p>#C2 Pop Pin - 1 pc</p> 	<p>#30 Flat Washer Ø13 x Ø25 - 1 pc</p> 												
<p>Tools</p> <table border="0"> <tr> <td>T1</td> <td>T2</td> <td>T3</td> <td>T4</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>M6</td> <td></td> <td></td> <td></td> </tr> </table>		T1	T2	T3	T4					M6			
T1	T2	T3	T4										
													
M6													



Step 1.

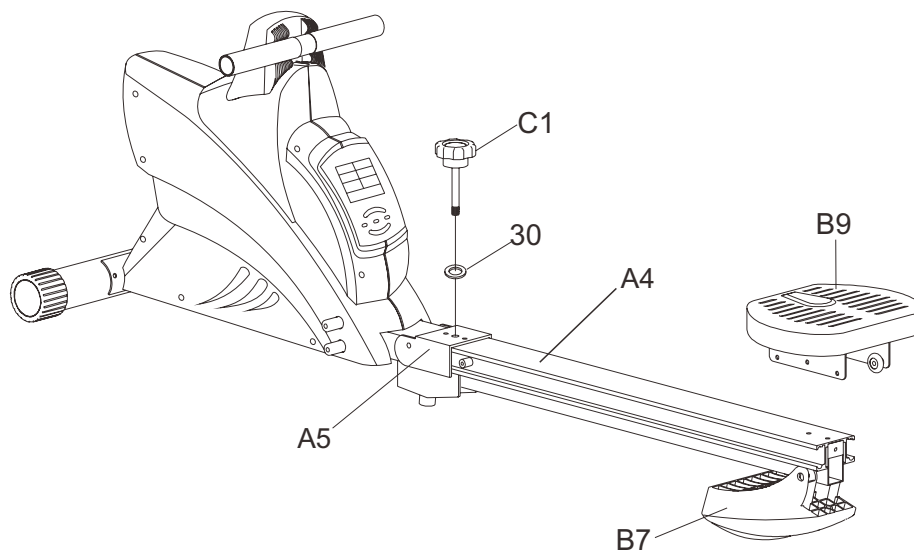
Attach **Front Stabilizer (A2)** to the **Main Frame (A1)**, and fasten with 2 **Carriage Bolts (1)**, 2 **Nuts (2)** and 2 **Flat Washers (27)**, use **Spanner Wrench #14 (T3)** to tighten and secure.



Step 2.

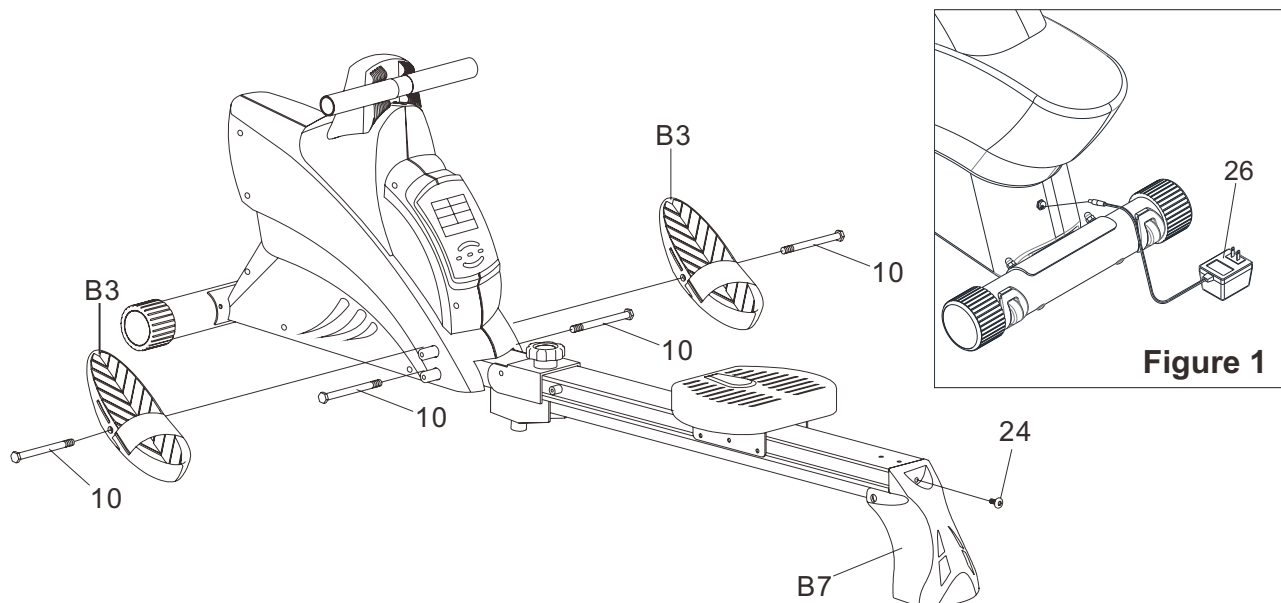
1. Assemble **Main Frame (A1)** with **Slide Rail (A4)**, fasten with **Bolts (11)**, **Nuts (12)** and **Pop Pin (C2)**, Use **Spanner Wrench #14 (T3)** to tighten and secure.

Assembly Instruction



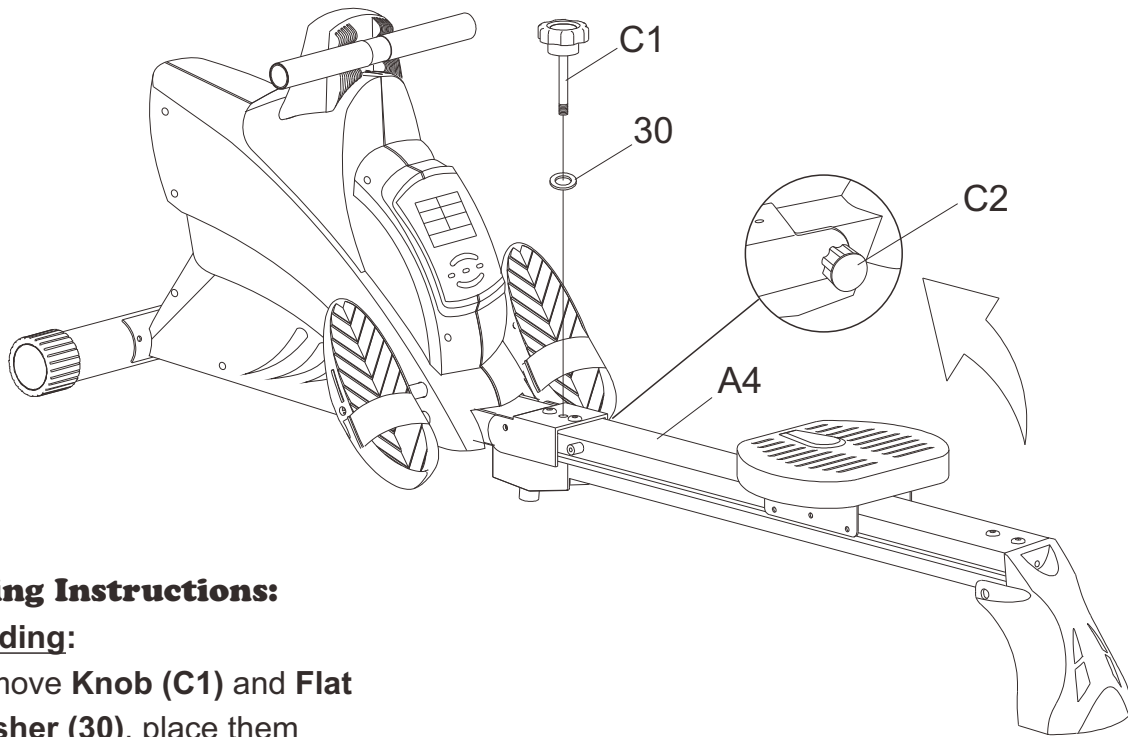
Step 3.

1. Fasten **Knob (C1)** and **Flat Washer (30)** onto **Folding Bracket (A5)**.
2. Flip down **Rear Fulcrum (B7)** on the end of **Slide Rail (A4)**, mount **Seat (B9)** to **Slide Rail (A4)**.



Step 4.

1. Flip **Rear Fulcrum (B7)** back to upright position and fasten with **Screw (24)**, use **Allen Wrench (T1)** to tighten and secure.
2. Fasten 2 **Shafts (10)** onto lower holes of the **Main Frame (A1)**, use **Spanner Wrench # 21 (T4)** to tighten and secure.
3. Insert **Shafts (10)** through **Pedals (B3)** and the upper holes on the **Main Frame (A1)**, use **Spanner Wrench #21 (T4)** to tighten and secure.
4. Refer to Figure 1. Plug the **Adapter (26)** into the socket located on the front of the rower. Plug the **Adapter (26)** into an electrical outlet.



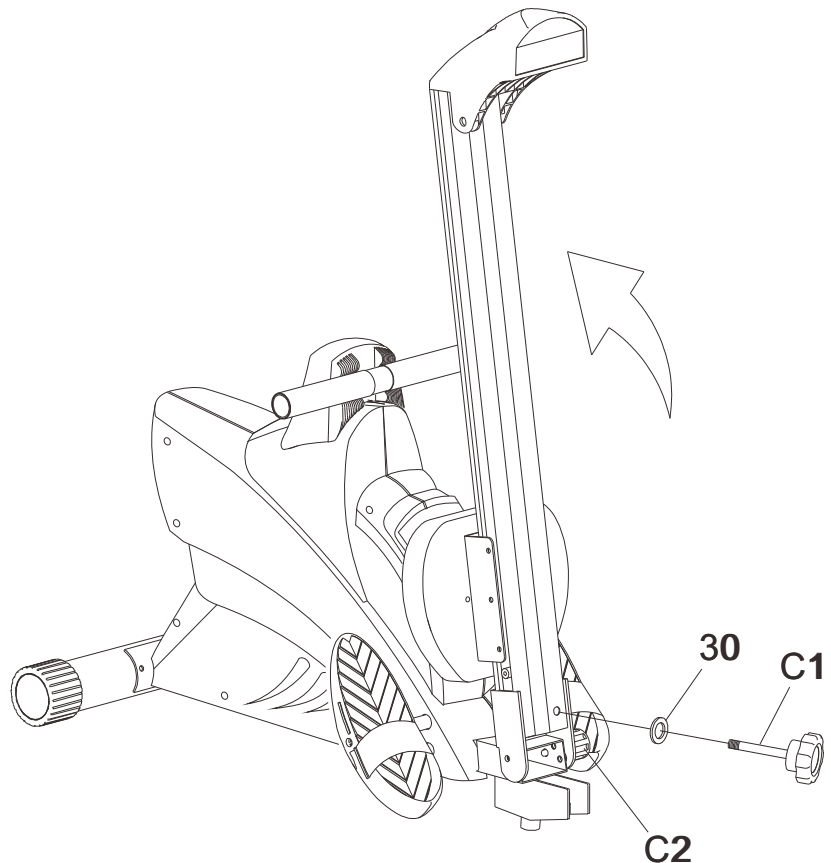
Folding Instructions:

1. Folding:

Remove **Knob (C1)** and **Flat Washer (30)**, place them aside. Pull **Pop Pin (C2)** out and lift the slide rail, then release **Pop Pin (C2)** until you hear a "click". That means the rail is locked in the vertical position. Insert **Knob (C1)** and **Flat Washer (30)** into the hole at the bottom of slide rail.

2. Unfolding:

Remove **Knob (C1)** and **Flat Washer (30)**, place them aside. Pull **Pop Pin (C2)** out and pull down the slide rail, then release **Pop Pin (C2)** until you hear a "click". That means the rail is locked in position. Insert **Knob (C1)** and **Flat Washer (30)** into the original place on slide rail.



⚠ CAUTION: Keep hands clear of the hinge when folding and unfolding the unit.

A good exercise program consists of a warm-up, aerobic exercise, and a cool down. Do the entire program at least two to three times a week, resting for a day between workouts. After several months you can increase your workouts to four or five times per week.

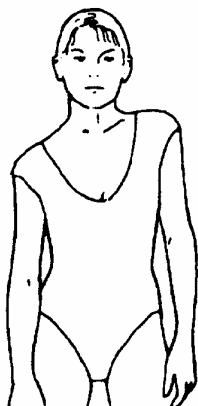
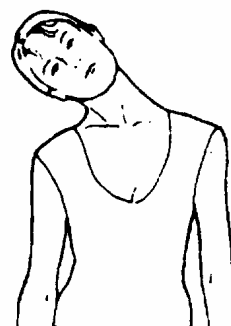
AEROBIC EXERCISE is any sustained activity that sends oxygen to your muscles via your heart and lungs. Aerobic exercise improves the fitness of your lungs and heart. Aerobic fitness is promoted by any activity that uses your large muscles e.g. legs, arms and buttocks. Your heart beats quickly and you breathe deeply. An aerobic exercise should be part of your entire exercise routine.

The **WARM-UP** is an important part of any workout. It should begin every session to prepare your body for more strenuous exercise by heating up and stretching your muscles, increasing your circulation and pulse rate, and delivering more oxygen to your muscles.

COOL DOWN at the end of your workout, repeat these exercises to reduce soreness in tired muscles.

HEAD ROLLS

Rotate your head to the right for one count, feeling the stretch up the left side of your neck, then rotate your head back for one count, stretching your chin to the ceiling and letting your mouth open. Rotate your head to the left for one count and then drop your head to your chest for one count.

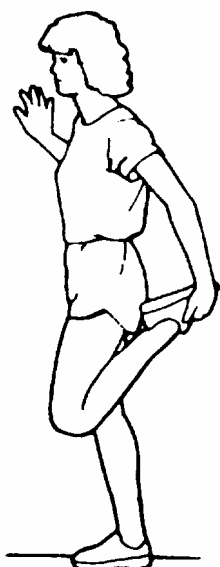
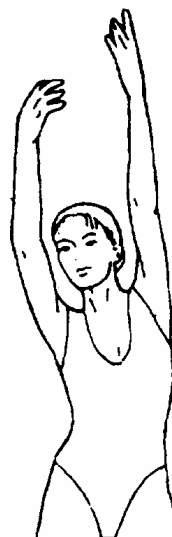


SHOULDER LIFTS

Lift your right shoulder toward your ear for one count. Then lift your left shoulder up for one count as you lower your right shoulder.

SIDE STRETCHES

Open your arms to the side and lift them until they're over your head. Reach your right arm as far toward the ceiling as you can for one count. Repeat this action with your left arm.

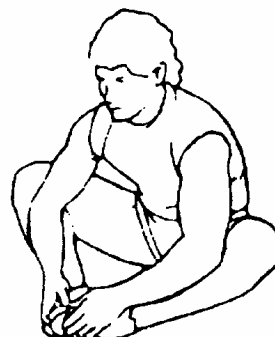


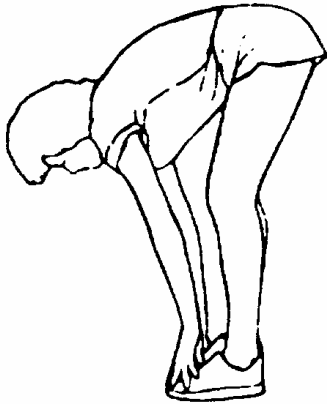
QUADRICEPS STRETCH

With one hand against a wall for balance, reach behind you and pull your right foot up. Bring your heel as close to your buttocks as possible. Hold for 15 counts and repeat with left foot.

INNER THIGH STRETCH

Sit with the soles of your feet together and your knees pointing outward. Pull your feet as close to your groin as possible. Gently push your knees toward the floor. Hold for 15 counts.



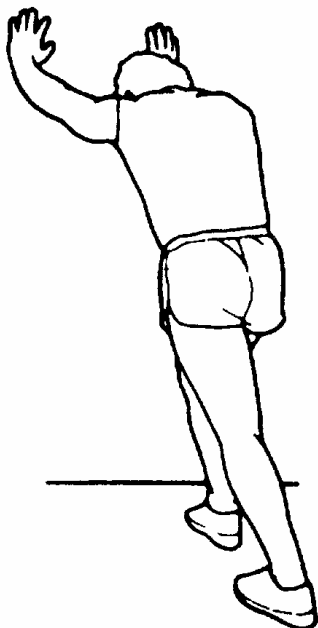
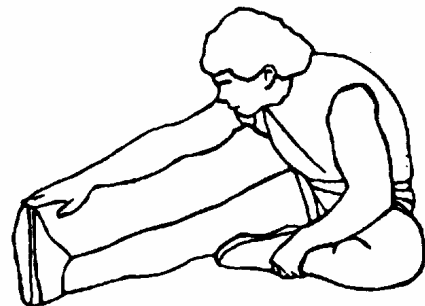


TOE TOUCHES

Slowly bend forward from your waist, letting your back and shoulders relax as you stretch toward your toes. Reach as far as you can and hold for 15 counts.

HAMSTRING STRETCHES

Extend your right leg. Rest the sole of your left foot against your right inner thigh. Stretch toward your toe as far as possible. Hold for 15 counts. Relax and then repeat with left leg.



CALF/ACHILLES STRETCH

Lean against a wall with your left leg in front of the right and your arms forward. Keep your right leg straight and the left foot on the floor; then bend the left leg and lean forward by moving your hips toward the wall. Hold, then repeat on the other side for 15 counts.

A. POWER UP:

- a. Connect all of the cables to the monitor.
- b. After power up all LCD segments will light up for 2 seconds, the Monitor will reset to the initial resistance mode.
- c. If the Monitor shows **E1 & E2** message please contact service.

B. KEY BOARD:

a. ENTER:

1. During the pause mode, press **ENTER** to select and confirm programs.
2. Confirm the setting values of **TIME**, **COUNT**, **DISTANCE**, **CALORIES** and **PULSE** in the heart rate control; **PROGRAM 8 & PROGRAM PROFILE** in the user setting program.

b. START/STOP/RESET:

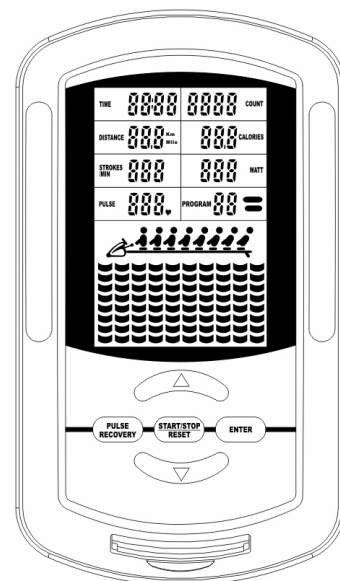
1. To **START** or **STOP** exercising.
2. Holding this button for 2 seconds will enter the initial mode and reset all value to zero.

c. UP & DOWN BUTTONS:

1. During the pause mode, cycle through programs or increase the setting values of **TIME**, **COUNT**, **DISTANCE**, **CALORIES** and **PULSE** in the heart rate control; **PROGRAM 8 & PROGRAM PROFILE** in the user setting program.
2. During the exercise mode, press the **UP** button to increase the load level, press the **DOWN** button to decrease the load level.

d. PULSE RECOVERY:

After completing an exercise, press to activate the pulse recovery function. You must wear the **HEART RATE TRANSMITTER**.



C. FUNCTIONS:

TIME: Exercise time will be shown on the display when exercising. If there is no signal detected within 4 seconds, it will reset to zero. (When presetting the program time during setup, **Programs 2-12** have a set point from 5:00 to 99:00).

Count Up: Without setting the time value, the monitor will count up from 0:00 to 99:59.

Count Down: Setting the exercise time, the monitor will count down from your setting values. Once the setting value is reached, the monitor will produce a beep sound, and then the time will begin counting up from 0:00.

COUNT: Count will be shown on the display when exercising. If there is no signal detected within 4 seconds, it will reset to zero.

Count Up: Without setting the count value, the monitor will count up from 0 to 9999.

Count Down: Setting the exercise count, the monitor will count down from your setting values. Once the setting value is reached, the monitor will produce a beep sound, and then the count will begin counting up from 0.

CALORIE: The calories burned will be displayed on the window. The range is 0.0-99.9 kcal.

Count Up: Without setting the calorie value, the monitor will count up from 0.0 to 99.9 kcal.

Count Down: Setting the calorie consumption, the monitor will count down from your setting values. Once the setting value is reached, the monitor will produce a beep sound, and then the count value will begin counting up from 0.0 kcal.

DISTANCE: The distance will be displayed on the window. The monitor will calculate from 1 mile to 99.9 miles.

Count Up: Without setting the distance value, the monitor will count up from 0.1-99.9 miles.

Count Down: Setting the exercise distance, the monitor will count down from your setting values. Once the setting value is reached, the monitor will produce a beep sound, and then the count value will begin counting up from 1 mile.

STROKES/MIN: Displays the current amount of strokes per minute during exercise.

WATT: Displays the amount of power being exerted during exercise, range: 0-999 watt.

PULSE: Displays the heart rate, range 40 to 240 beats per minute (**BPM**).

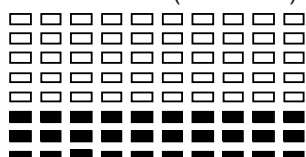
NOTE:

To use this function a **Heart Rate Transmitter** must be worn in order to register your heart rate for displaying. In this function the **Heart Rate Transmitter** sends your heart rate information to a built in receiver, the receiver then displays your heart rate information on the monitor. Each heart rate signal is accompanied by a “♥” symbol flash. If the Heart Rate Transmitter is incorrectly worn around your chest, a “P” mark will be displayed.

D. PROGRAM PROFILE:

The computer contains 12 different programs. You can preset the program time so that the computer will divide the time into 10 intervals. If the program time is not preset, the computer will count up 1 minute for each interval of Program 1 (Manual Program), for Programs 2-12 the computer will use a preset value of 30 minutes, programs will run in cycle.

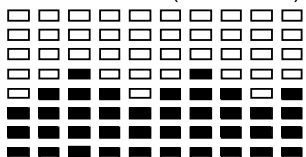
PROGRAM 1 (MANUAL):



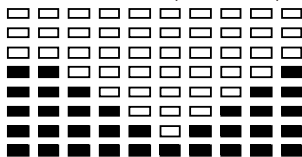
Manual Program 1: Program 1 is a manual program; in this program the user has full manual control of the workload. Increase the load using “▲” button, decrease the load using “▼” button.

Preset Programs 2-7: Programs 2 through 7 are automatic programs, however the user may still increase or decrease the tension level of these programs using the “▲/▼” buttons. Preset program profiles are displayed on the face of the computer. Under these Preset Programs users may still set a value for **TIME**, **COUNT**, **CALORIE** and **DISTANCE**. To set a value, refer to the **FUNCTIONS** section of the computer instructions.

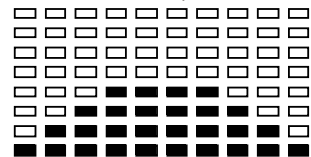
PROGRAM 2 (ROLLING):



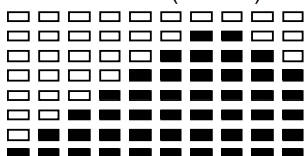
PROGRAM 3 (VALLEY):



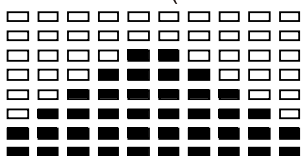
PROGRAM 4 (FAT BURN):



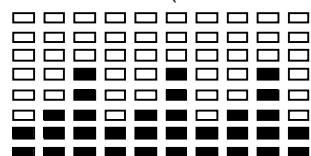
PROGRAM 5 (RAMP):



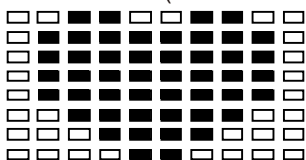
PROGRAM 6 (MOUNTAIN):



PROGRAM 7 (INTERVALS):



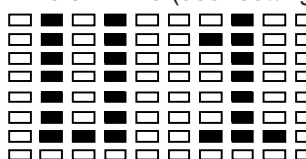
PROGRAM 8 (TARGET H.R.):



Target Heart Rate Program 8: This program requires the user to wear a Heart Rate Transmitter around their chest. This program is controlled by heart rate. When the user selects **Program 8** the **PULSE** window located on the monitor will display a flashing **90** (the initial setting value), at this time the user may input their desired **Target H.R.** from

90-220BPM. In this program the computer will automatically adjust the tension level during exercise according to the users' heart rate, detected by the heart rate transmitter, in order to keep the users heart rate within the zone of plus & minus **5 BPM** of their set **Target H.R.**

PROGRAM 9 (user setting):



User Setting Programs 9-12: (U1-U4) Programs 9 through 12 are programs that allow the user(s) to manually preset each of the 10 intervals in order to create personal exercise profile(s). To create a profile scroll through the **User Settings Program** until “**Column**” flashes on the Monitor, press the “▲ / ▼” buttons to create your exercise program,

press the **ENTER** button to confirm the first Column of your exercise profile. Repeat this process to create additional Columns.

Under the User Settings Programs 9-12 (U1-U4), users may still set a value for **TIME, COUNT, DISTANCE** and **CALORIE**, (in that order), to set press the **ENTER** button to select the program, use the “ ▲ / ▼ ” buttons to set the function values, press the **ENTER** button to input the values. Or pass some of the inputs, by pressing the **ENTER** button. The values will be stored in the memory after setup. Users may also manually increase or decrease the functions value in each interval by pressing the “ ▲ / ▼ ” buttons, the value stored in the memory will not be changed or affected by doing this.

NOTE:

1. Your personal exercise profile will be stored in the memory of the monitor.
2. When you reach one of the targets such as **TIME, COUNT, DISTANCE** or **CALORIES**, the monitor will produce a beep sound and then stop.
3. If you set more than one target and would like to continue, press **START** to begin the exercise again.
4. The maximum number of users able to create a personal exercise profile is 4.



TRAVEL DISTANCE INDICATOR

Indicates the distance traveled on the rower during during exercise.

E. PULSE RECOVERY FUNCTION:

NOTE: To use this program, you must wear the **Heart Rate Transmitter**.

The **Pulse Recovery** function is used upon completion of an exercise, the function measures the amount of time it takes for the users' heart rate to return to a resting heart rate, the quicker the users heart rate returns to a resting heart rate the better. The computer monitors your heart rate for 60 seconds and then calculates a Pulse Recovery value from **F1- F6**.

F1.0 = Excellent

F2.0 = Good

F3.0 = Fair

F4.0 = Below Average

F5.0 = Not Good

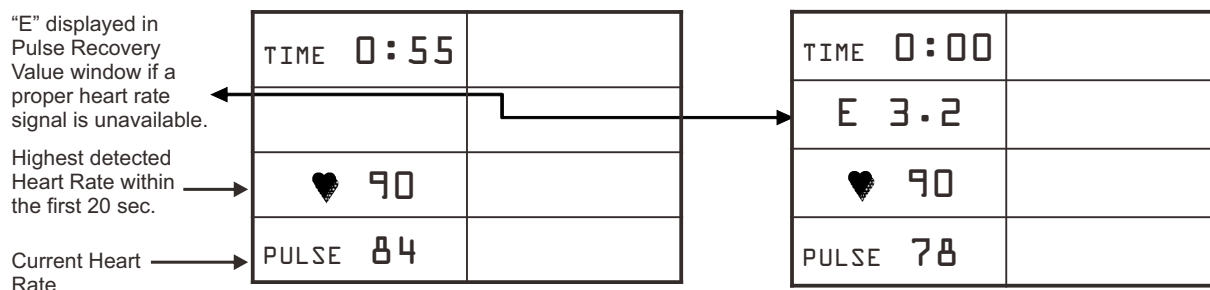
F6.0 = Poor

The readings mentioned are to be used as points of reference, this information is **NOT** to be used for any medical reference or purposes.

When starting the Pulse Recovery function, a “♥” symbol will be displayed, after 5 seconds your heart rate will then be displayed. Once your heart displays on the monitor, press the **Pulse Recovery** button, during the Pulse Recovery function, only the **PULSE** and **TIME** are active. The **TIME** will begin count down from 0:60 seconds, during this time the “♥” symbol will blink, when the **TIME** reaches 0:00 the computer will sound an audible alarm for ten seconds and then display your **Pulse Recovery** reading from **F1.0** to **F6.0**. (During Pulse Recovery, press any button to stop audible alarm. Press any button to exit Pulse Recovery function).

NOTE:

1. Press the Pulse Recovery button at any time to run the pulse recovery function, the pulse recovery function can be ran during an exercise and while running another program.
2. Once the pulse recovery function is initiated the **TIME** will begin count down from 0:60 seconds down to 0:00, during these (60) seconds you will not be able to quit the pulse recovery function. An "E" message will display in the pulse recovery value window of the monitor when there is no heart rate signal detected or available.



F. HEART RATE MONITORING:

To achieve the maximum results from your workout on this **817 Rowing Machine** it is imperative that you exercise within your target heart rate zone for a minimum of 20 minutes. Studies have shown that exercising below your target heart rate zone will not allow you to burn fat or improve cardiovascular fitness, working above your target heart rate zone is counter-productive as well.

Everyone has their own specific target heart rate zone, when exercising your main goals should be reaching that zone and staying within that zone. Determining your personal target heart rate zone is calculated by the following:

STEP 1: Find your maximum heart rate using this formula:

$220 - \text{Your Age} = \text{predicted max heart rate.}$

Example: A person 40 years of age would have a predicted max heart rate of 180 **BPM (Beats Per Minute)**, $220 - 40 = 180$.

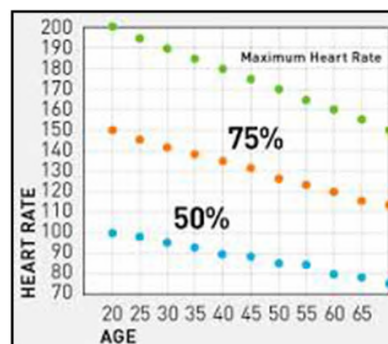
STEP 2: Your target heart rate zone is a range of 55% to 90% of your max heart rate.

$\text{Predicted Max Heart Rate} \times .55 = \text{Low End of your target heart rate zone.}$

$\text{Predicted Max Heart Rate} \times .90 = \text{High End of your target heart rate zone.}$

Example: A person 40 years of age would have a Target Heart Rate Zone of 99 to 162 **BPM (Beats Per Minute)**; $180 \times .55 = 99$. $180 \times .90 = 162$.

For additional conditioning guidelines and to set up the target heart rate for programs, the chart to the right provides a reference to **Target Heart Rate zones** estimated by age.



LCD W/PROGRAM MONITOR TROUBLE SHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	SOLUTION
E1	No signal from motor gear .	<ol style="list-style-type: none"> 1. Review the Assembly Instructions and check that all the computer plugs and sockets are firmly and correctly connected. 2. Review the machine's Magnetic Resistance System to ensure that it is set correctly at it can freely be adjusted. A symptom of the previous problem is the Motor will struggle to adjust the resistance and begin making an abnormal sound. If this happens the Motor may already be damaged by some kind of interference. After freeing the interference the Motor will have to be checked that it still correctly. 3. Motor Problems: <ol style="list-style-type: none"> a. Symptoms include an unusually loud noise coming from the Motor, which means the Gears are NOT meshing correctly. Try reversing the resistance and try again. If this fails then Replace the Motor. b. If the Motor fails to move at all then please recheck as per Solution above. c. If this fails then Replace the Motor.
E2	The Computer cannot interface with the IC Chip .	<p>Disconnect the Adaptor and/or remove the Batteries. Reconnect the Adaptor and /or the Batteries. This will REBOOT the IC Chip and may help the Computer interface with the IC Chip. Remove and reinsert the IC Chip If reinsertion fails then replace the IC Chip with a NEW IC Chip.</p>

IMPORTANT:

Safe and effective use can only be achieved if the equipment is assembled, maintained and used properly. It is your responsibility to ensure that the equipment is maintained regularly. Any components found to be worn and/or damaged should be replaced before continuing use of the equipment. Equipment should only be used and stored indoors, prolonged exposure to weathering and changes in temperature and humidity may have a severe impact on electrical components and moving parts of the machine.

Daily Maintenance:

- Clean and remove sweat and moisture after each use.
- Perform inspection of all nuts and bolts associated with moving parts of the equipment, tighten as required.
- Check the mobility of moving parts and components on the equipment, lubricate if required.
- Clean plastic parts of the equipment using a damp cloth, clean metal parts of the equipment using a dry cloth. Do not use cleaning products to clean the equipment.

Weekly Maintenance:

- Thoroughly inspect the parts of the equipment; nuts, bolts, screws and moving parts such as foot pedals, seat, pulley's, etc. Tighten or replace parts as required.

Monthly Maintenance:

- Inspect the frame and inner working components for wear and tear as well as damage, maintenance or replace as required.

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