OWNER`S MANUAL

Model No.

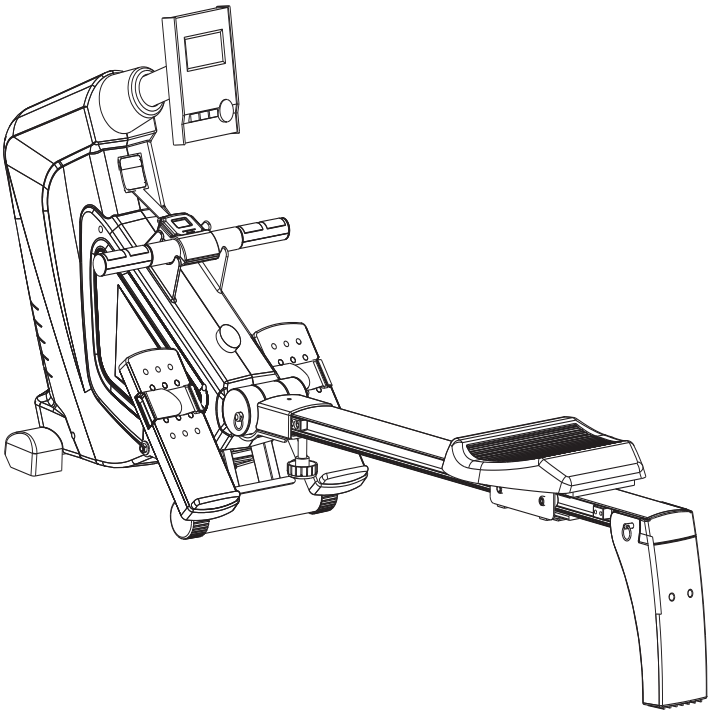
16805538990

Everlast Rower

- *Assembly*
- *Operation*
- *Exercise*
- *Parts*
- *Warranty*

EVERLAST®

Rower



Retain for
Future reference

CAUTION: You must read and understand this owner's manual before operating unit.

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MANUFACTURE'S ONE-YEAR LIMITED WARRANTY

Your **Everlast** is warranted for one year from the date of purchase against defects in material, when used for the purpose intended, under normal conditions, and provided is receives proper care. Any part found defective or missing will be sent at no cost when returned in accordance with the terms of this warranty.

Home Use Limited WARRANTY

Frame 1 Year
All Other Components 1 Year
Labour 1 Year

This warranty is not transferable and is extended only to the original owner.

The warranty shall not apply to rowing machines which are (1) used for commercial or other income producing purposes, or (2) subject to misuse, neglect, accident or unauthorized repairs and alterations.

This warranty provided herein is in lieu of all other express warranties. Any implied warranties, including any implied warranties of merchantability or fitness for particular purpose, are limited in duration to the first 12 months from the date of purchase. All other obligations or liabilities, including liability for consequential damages, are hereby excluded.

REPAIR PARTS AND SERVICE

All of the parts for the rowing machine, shown in figure can be ordered from Dyaco Canada Inc. 6050 DON MURIE STREET, NIAGARA FALLS, ONTARIO L2G 0B3. When ordering parts, the parts will be sent and billed at the current prices. Prices may be subject to change without notice. Check or money order must accompany all orders. Standard hardware items are available at your local hardware store.

To ensure prompt and correct handling of any errors, or to answer any questions, please call our Toll Free number: 1-888-707-1880, or local number 1-905-353-8955 or fax 1-905-353-8968 or email customerservice@dyaco.ca **or visit us at: www.dyaco.ca**. Office hours are from 8:30 AM to 5:00 PM Monday to Friday Eastern Standard Time.

Always include the following information when ordering parts

- Model Number
- Name of Each Part
- Part Number of Each Part

SAFETY PRECAUTIONS

Thank you for purchasing our product. Even though we go to great efforts to ensure the quality of each product we produce, occasional errors and /or omissions do occur. In any event should you find this product to have either a defective or a missing part please contact us for a replacement.

This product has been designed for home use only. Product liability and guarantee conditions will not be applicable to products being subjected to professional use or products being used in a gym center.

This exercise equipment was designed and built for optimum safety. However, certain precautions apply whenever you operate a piece of exercise equipment. Be sure to read the entire manual before assembly and operation of this machine. Also, please note the following safety precautions:

1. Read the OWNER'S OPERATING MANUAL and all accompanying literature and follow it carefully before using your rowing machine.
2. If dizziness, nausea, chest pains, or any other abnormal symptoms are experienced while using this equipment, STOP the workout at once. CONSULT A PHYSICIAN IMMEDIATELY.
3. Inspect your exercise equipment prior to exercising to ensure that all nuts and bolts are fully tightened before each use.
4. The rowing machine must be regularly checked for signs of wear and damage. Any part found defective must be replaced with a new part from the manufacturer.
5. Fitness equipment must always be installed on a flat surface, It is recommended to use an equipment mat to prevent the unit from moving while it is being used, which could possibly scratch or damage the surface of your floor.
6. No changes must be made which might compromise the safety of the equipment.
7. It is recommended to have a minimum of 2' safe clearance around the exercise equipment while in use.
8. Ensure that the rail is locked properly when in storage.
9. Do not allow children to use or play on the rower. Keep children and pets away from this equipment at all times while exercising.
10. The rower should only be used by one person at a time.
11. Maximum user weight 285lbs (130KG).
12. Warm up 5 to 10 minutes before each workout and cool down 5 to 10 minutes afterward. This allows your heart rate to gradually increase and decrease and will help prevent you from straining muscles.
13. Never hold your breath while exercising. Breathing should remain at a normal rate in conjunction with the level of exercise being performed .
14. Always wear suitable clothing and footwear while exercising. Do not wear loose fitting clothing that could become entangled with the moving parts of your rowing machine. Do not exercise in bear feet or socks. Proper footwear such as running, walking or cross training shoes should be worn.
15. Tie all long hair back. Remove all personal jewelry before exercising

16. Be careful to maintain your balance while using, mounting, dismounting the rower, loss of balance may result in a fall and bodily injuries.
17. After eating, allow 1-2 hours before exercising as this will help to prevent muscle strain.
18. Injuries may result from incorrect or excessive training and using the equipment otherwise than as directed or recommended by your doctor.
19. Care must be taken when lifting or moving the equipment, so as not to injure your back. Always use proper lifting techniques
20. Do not use the seat(84) to move the Everlast Rower. The seat(84) will move and the seat carriage(85) may pinch your hands or fingers. When folding or unfolding the unit, keep all children away and make sure hands are clear of any folding or pinch point.
21. Before using, check the condition of the strap(9). Replace the strap attached to the spring box(9) if it is cracked or broken.
22. The decal shown in the next page was placed on the rower. If the decal is missing, or if it is not legible, please call the toll free telephone number at the bottom of the page to order a free replacement decal. Apply the decal at the location shown.

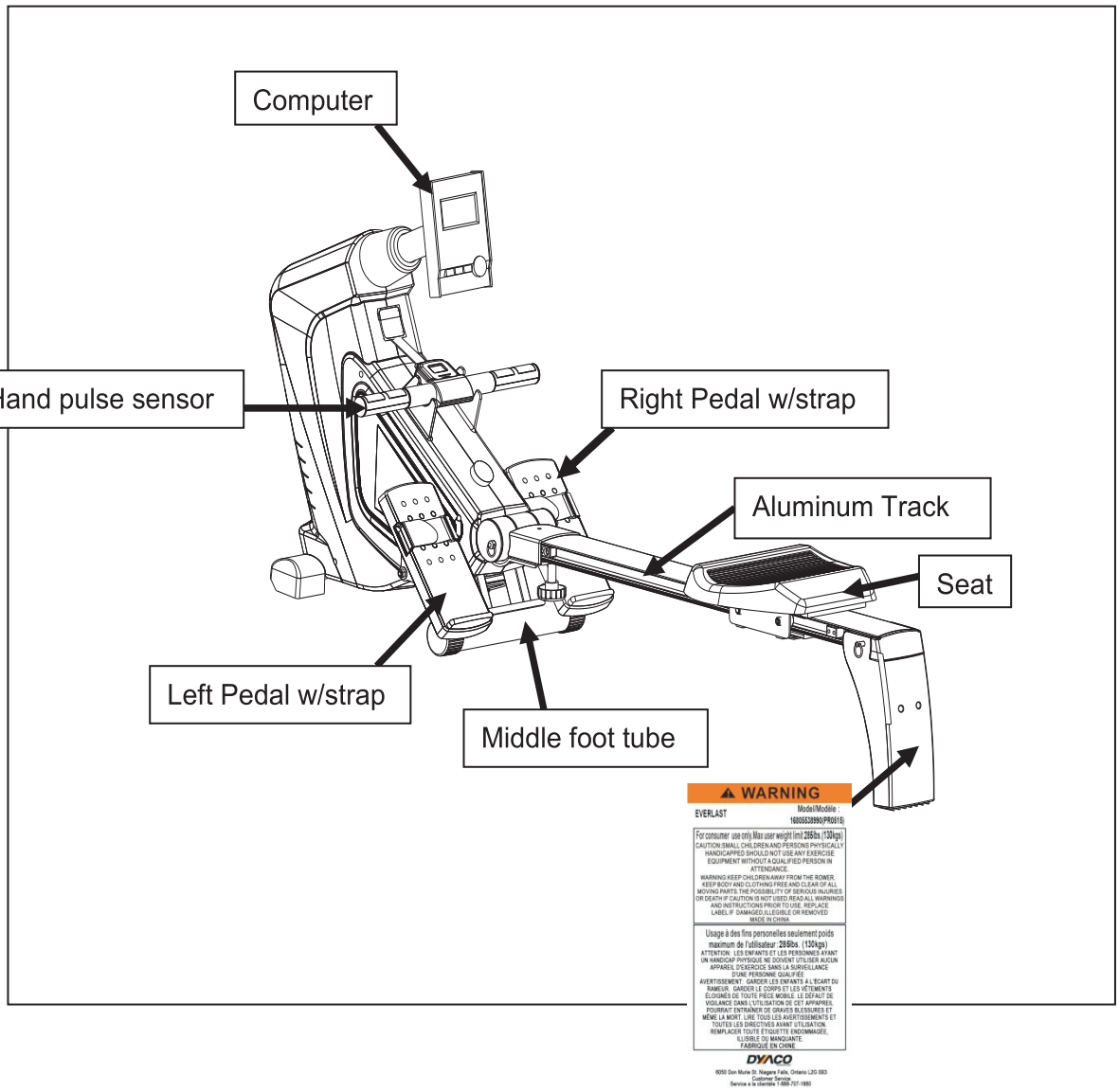
WARNING: BEFORE BEGINNING ANY EXERCISE PROGRAM CONSULT YOUR PHYSICIAN. THIS IS ESPECIALLY IMPORTANT FOR INDIVIDUALS OVER THE AGE OF 35 OR PERSONS WITH PRE-EXISTING HEALTH PROBLEMS. READ ALL INSTRUCTIONS BEFORE USING ANY FITNESS EQUIPMENT. WE ASSUME NO RESPONSIBILITY FOR PEROSNAL INJURY OR PROPERTY DAMAGE SUSTAINS BY OR THROUGH THE USE OF THIS PRODUCT.

SAVE THESE INSTRUCTIONS

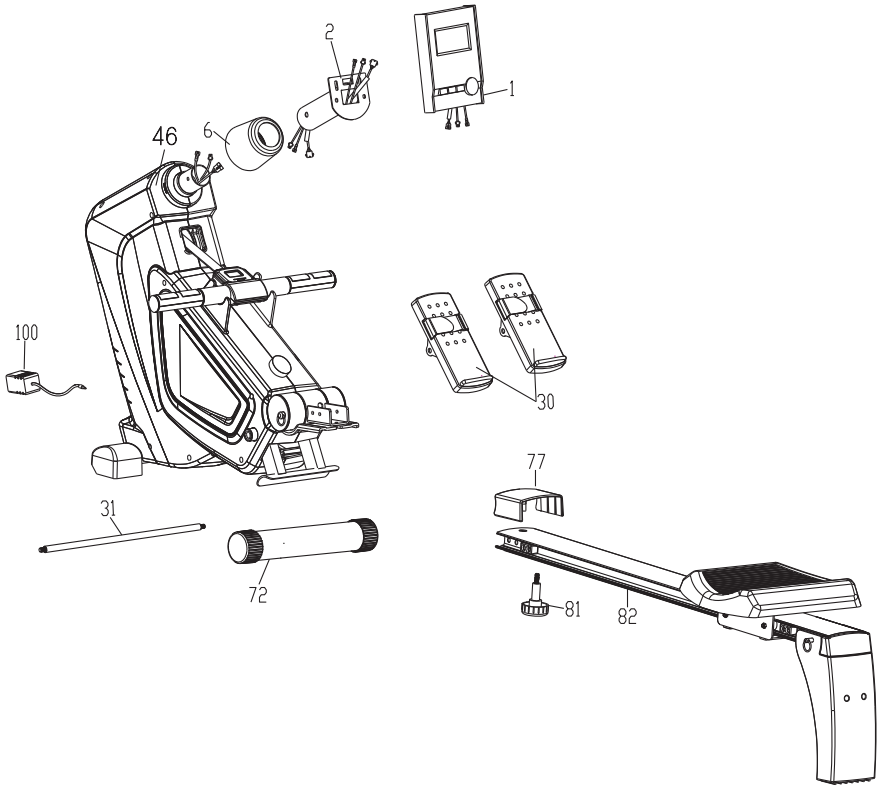
BEFORE YOU BEGIN

Thank you for choosing the Everlast Rower. We take great pride in producing this quality product and hope it will provide many hours of quality exercise to make you feel better, look better, and enjoy life to its fullest. It's a proven fact that a regular exercise program can improve your physical and mental health. Too often, our busy lifestyles limit our time and opportunity to exercise. The Everlast rower provides a convenient and simple method to begin your assault on getting your body in shape and achieving a happier and healthier lifestyle. Before reading further, please review the drawing below and familiarize yourself with the parts that are labeled.

Read this manual carefully before using the Everlast rower. Although Dyaco Canada constructs its products with the finest materials and uses the highest standards of manufacturing and quality control, there can sometimes be missing parts or incorrectly sized parts. If you have any questions or problems with the parts included with your Everlast rower please do not return the product. Contact us FIRST! If a part is missing or defective call us toll free at 1-888-707-1880. Our Customer Service Staff is available to assist you from 8:30 A.M. to 5:00 P.M. (Eastern Time) Monday through Friday. Be sure to have the name and model number of the product available when you contact us.



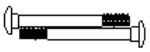
PRE-ASSEMBLY CHECK LIST



PART NO.	DESCRIPTION	Q'TY
46	Main Frame	1
6	Console mast cover	1
2	Console mast	1
72	Middle foot tube	1
31	Pedal axis	1
77	End cap	1
81	Knob	1
82	Aluminum Track	1
30	Left / Right Pedal	2
1	Computer	1
100	Adaptor	1
	Hardware Pack	1
	Manual	1

HARDWARE PACKING LIST

Above described parts are all the parts you need to assemble this machine. Before you start to assemble, please check the hardware packing to make sure they are included.

P433M hardware packing list					
X2	(79) 2PCS	X2	 (73) M8X75L 2PCS	X1	(102) 13-15
X2	(78) M6X80L 2PCS	X2	(4) ø8Xø19X2T 2PCS	X1	(103) 13-14-15
X2	(83) M6 2PCS	X4	(28) M8 4PCS	X1	(104) 6mm*30mm*84mm
X2	(29) ø8Xø22X2T 2PCS	X1	(80) ST3.9X20L 1PCS		

Note: Above parts are all the parts needed to assemble this machine. Before you start to assemble, please check the hardware packing to make sure they are included.

ASSSEMBLY INSTRUCTION

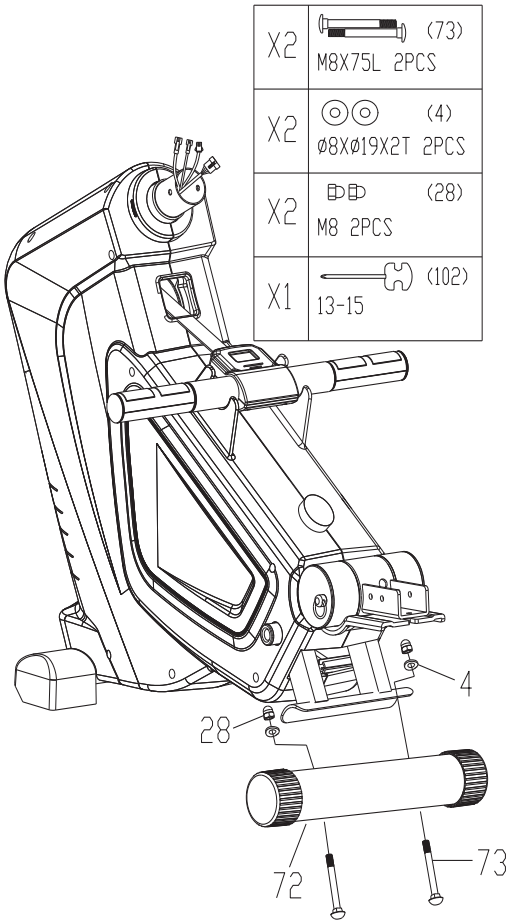
This manual is designed to help you easily assemble, adjust and use this machine. Please read this manual carefully. For the sake of familiarizing yourself with the parts identified in the instruction, first study the overview drawing.

Set all parts in a clear area on the floor and remove the packing material. Refer to the parts list for help to identify the parts. It will take two people to assemble your unit.

Note: If a part is not in the hardware kit, check to see if it has been preassembled. To avoid damaging parts, do not use power tools for assembly.

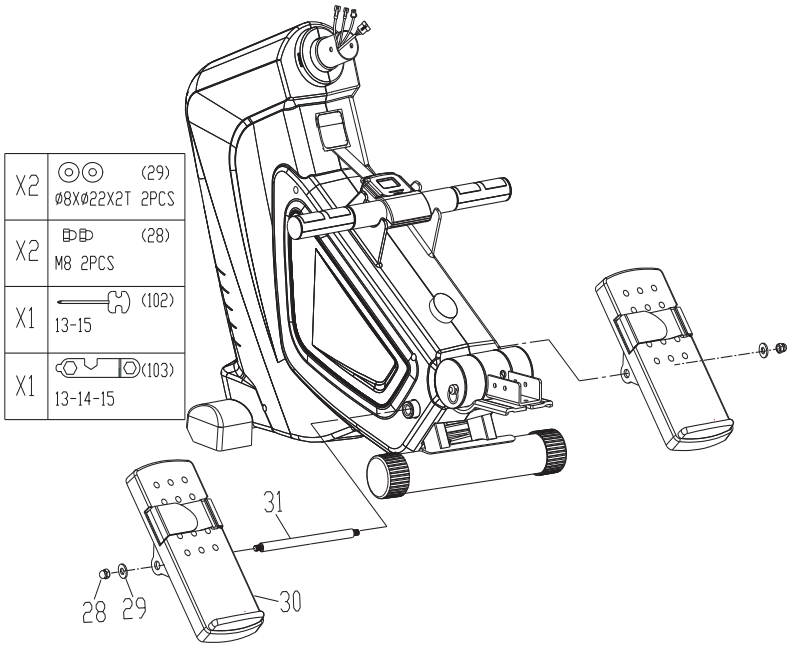
STEP 1

1. Attached the Middle foot tube (72) to the main body. Secure with two M8x75mm Allen Bolts (73) and two Washers (4) and M8 Cap nut (28)。



STEP 2

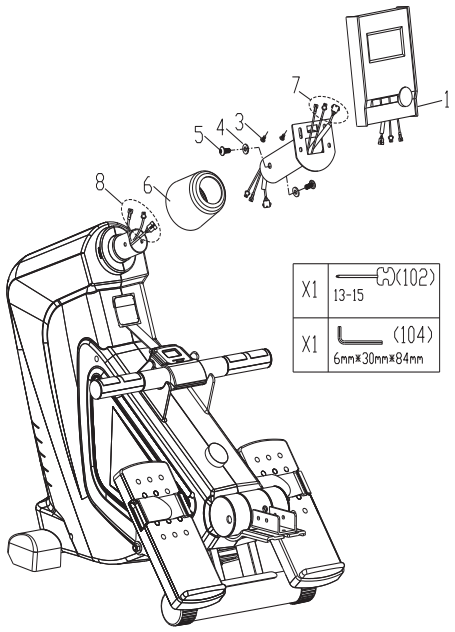
According to the picture, firstly put the pedal axis (31) though the sleeve, then install the pedals on both sides and secure them with one flat washer (29) and one M8 Cap nut (28).



STEP 3

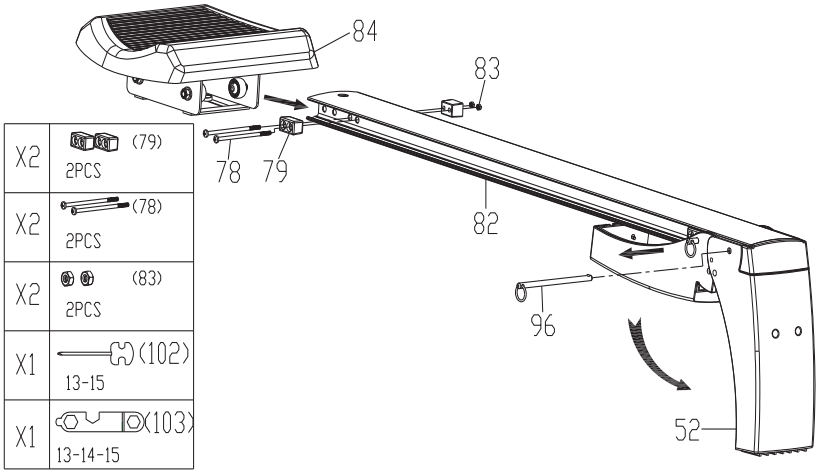
1. Slide the console mast (2) through the console mast cover (6). Connect the extension cable (7) to the extension sensor wire (8). Secure the console mast (2) to the frame (46) using two washers (4) and two screws (5).
2. Connect the extension cable (7) with the wire from the computer (1).
3. Secure the computer to the console mast (2) with four screws (3).

Page 9 第九页红色部分需修改



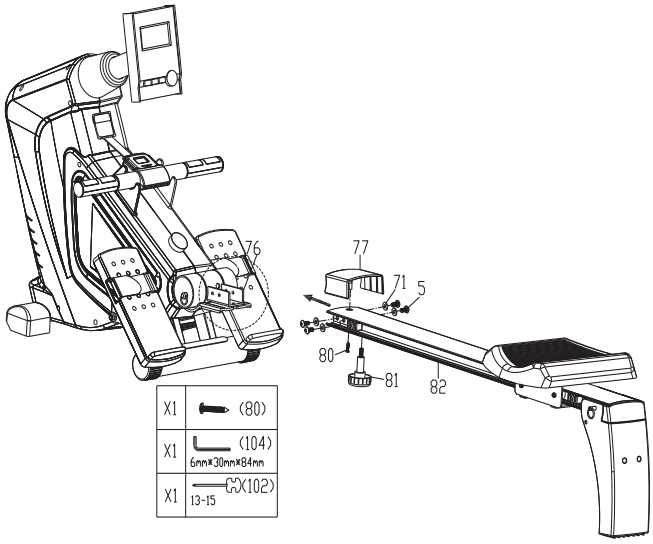
STEP 4

1. Pull out the fixing pin (96) and turn the supporter (52) to the right position following the arrow direction and insert the fixing pin (96) back into the supporter (52)
2. Slide the seat (84) onto the aluminum track (82) and Install the two buffering cushions (79) on each side of the aluminum track (82) with two bolts(78) and two hex nuts (83).



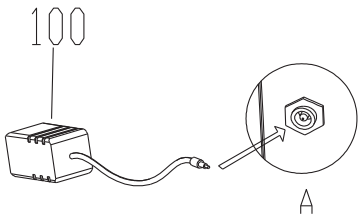
STEP 5

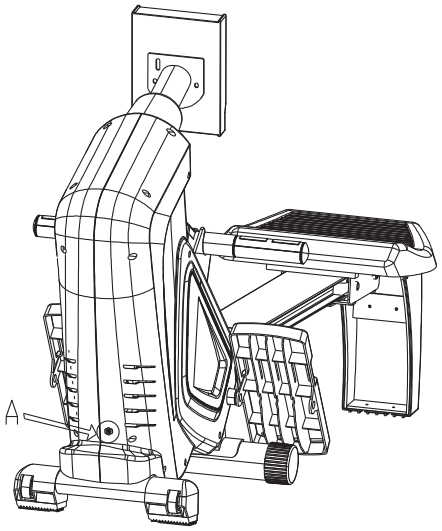
1. Unscrew the knob (81) from the frame, following the arrow insert the aluminum track (82) into the track bracket (76), secure the aluminum track (82) with four flat washers (71) and four screws (5)
2. Place the cover (77) onto the aluminum track (82) and secure it with screw(80)
3. Reinsert the knob (81) through the aluminum track (82) and into the track bracket (76) and fasten it !



STEP 6

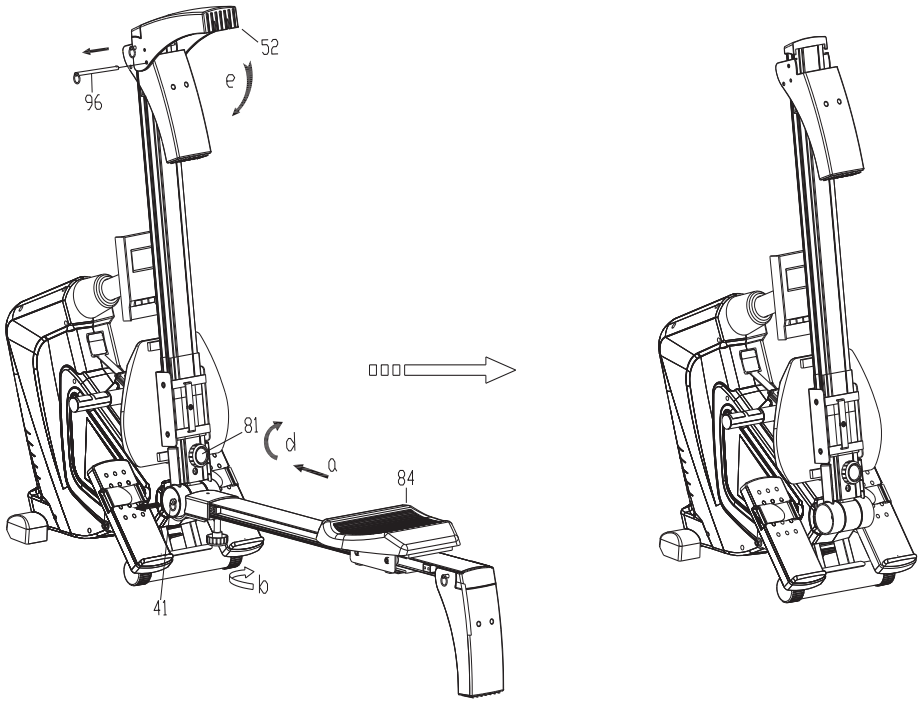
Insert the plug of the adaptor (100) into the socket (A) as shown.
Plug the other end of the adaptor into a wall outlet.





You have completed the assembly of your rower.

STORAGE AND MAINTENANCE



Steps：

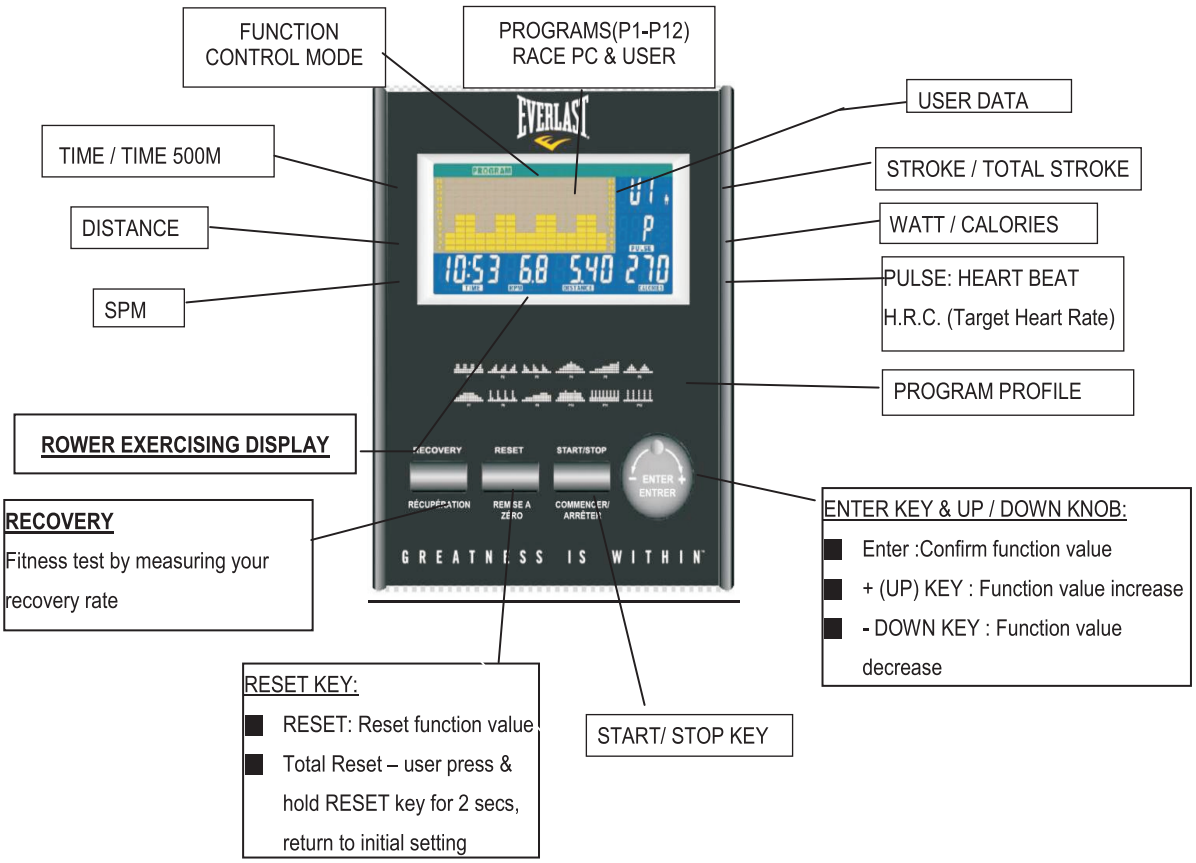
1. Slide the seat (84) to the front of the aluminum track (82) following arrow a, then loosen the knob (81) following arrow b, pull out the fixing pin（41） and release it after folding the rail to the right position
2. Fasten the knob (81) following d first , pull out the fixing pin(96) and put back the fixing pin after folding the rear supporter(52) to the right position arrow e

MAINTENANCE

The safety and integrity designed into the Everlast rower can only be maintained when the rower is regularly examined for damage and wear. Special attention should be given to the following:

1. Adjust the resistance and verify that the Magnetic Brake System provides tension.
2. Clean the roller tracks in the RAIL with an absorbent cloth.
3. Verify that all nuts and bolts are present and properly tightened. Replace missing nuts and bolts. Tighten loose nuts and bolts.
4. Verify that the CAUTION LABEL is in place and easy to read.
5. It is the sole responsibility of the user/owner to ensure that regular maintenance is performed.
6. Worn or damaged components shall be replaced immediately or the Everlast rower removed from service until repair is made.
7. Only Dyaco Canada supplied components shall be used to maintain/repair the Everlast rower.
8. Keep your rower clean by wiping it off with an absorbent cloth after use.

Monitor instruction



A. OPERATION DESCRIPTION

1. Make sure to plug in the proper power adaptor (6V/1A), After power on, the monitor will beep along with the LCD light-up for 1 minute.

2. BUILT-IN Heart Rate Receiver with optional Wireless Chest Strap Transmitter
The computer has built-in Heart Rate receiver. The user can put on a wireless chest strap to detect the Heart Rate ; How to put on a wireless chest strap, please refer to the wireless chest strap page.

3. Powering on by pressing START/STOP key for full display. Press START/STOP key to enter MANUAL control mode directly and start exercise.

4. ENTER "CONTROL MODE"- MANUAL / PROGRAMS / WATT/ USERS / H.R.C./ RACE

4.1 Manual

LOAD1 and display in dot matrix after pressing ENTER key for confirmation, now Turn Knob + UP increase / - Down decrease for adjusting LOAD value and ENTER key for confirmation, **Turn Knob + UP increase / - Down decrease** again for setting, Press START and begin to exercise after finish all functions setting (I.e. TIME、DISTANCE、CALORIES、HEART RATE、STROKE).

4.2 PROGRAM

If choose Program diagram P1-P12 in dot matrix after pressing ENTER -key to program. After select ideal program diagram to Turn Knob + UP increase / - Down decrease for adjusting LOAD value, and begin to exercise after finish all functions' setting (I.e. TIME、DISTANCE、CALORIES、HEART RATE、STROKE).

4.3 USER

Create USER own Program profile through U1~U4 by setting the resistance level for each individual segment. Then the Program will be automatically saved for future use. U0 ENTER can be set the same as U1~U4 but this Program cannot be saved.

4.4 WATTS CONSTANT

User can default WATTS value at his/her desire 10-350 watts between 10~350 watts by using the UP/ DOWN knob. To fix WATTS constant value and then press START/STOP key. Utilizing WATTS control mode to train yourself in different WATTS constant.

4.5 H.R.C (can only be used with the optional wireless chest strap transmitter)

HEART RATE CONTROL- Select your own target Heart Rate by choosing from one of the preset programs 55%, 75%， or 90%. Please ENTER your age into the User Data to ensure that your target heart rate is set correctly. The HEART RATE display will flash when you have reached your target heart rate according to the Program you have chosen.

i. 55% -- DIET PROGRAM

ii. 75% -- HEALTH PROGRAM

iii. 90% -- SPORTS PROGRAM

iv. TAG --USER SET TARGET HEART RATE

4.6 RECOVERY

When you have finished your workout, press RECOVERY. For RECOVERY to function correctly, it needs your Heart Rate input. TIME will count down from 1 minute and then your fitness level from F1 to F6 will be displayed.
NOTE: during RECOVERY, no other displays will operate.

F 1 ~ F6 = RECOVERY HEART RATE LEVEL

Score	Condition	Heart Rate (from test HR minus end HR)
F1	Excellent	Above 50
F2	Good	40 ~ 49
F3	Average	30 ~ 39
F4	Fair	20 ~ 29
F5	Poor	10 ~ 19
F6	Very Poor	Under 10

4.7 RACE

Turn Knob + UP increase / - Down decrease to adjust SPM of PC,and racing DISTANCE , PRESS START to begin the RACE , USER & PC symbol blinking to show who run first (USER LOAD is adjustable in race) . End of race distance, the result is WIN , or USER LOSE.

4.8 TIME/500M

Computer/console will automatically calculate user's rowing 500 meter need to spend how much time regarding with USER'S SPM. We call TIME/500M function value.

4.9 AVERAGE: A + Display

USER press STOP KEY to stop workout, the monitor will show A + (AVERAGE -FUNCTION VALUE), Include TIME/500 M ; SPM ; HEART RATE.

B. TIPS

1. Option: Plug in AC Adaptor (**6 V/1A**).
2. Keep moisture away from computer.

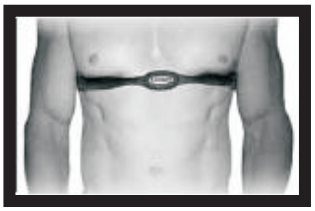
Note:

The hand pulse sensors on the handle will display your current heart rate on the monitor handle only. (handle monitor requires 2 AAA batteries)

The heart rate on the monitor can only be obtained by wearing the optional wireless chest strap transmitter.

The bottle of lubricant included with your rower is to lubricate the track for the seat to prevent wear of the wheels and the rail.

USING **HEART RATE TRANSMITTER (Optional)**



How to wear your wireless chest strap transmitter:

1. Attach the transmitter to the elastic strap using the locking parts.
2. Adjust the strap as tightly as possible as long as the strap is not too tight to remain comfortable.
3. Position the transmitter with the centered in the middle of your body facing away from your chest (some people must position the transmitter slightly left of center). Attach the final end of the elastic strap by inserting the round end and, using the locking parts, secure the transmitter and strap around your chest.
4. Position the transmitter immediately below the pectoral muscles.
5. Sweat is the best conductor to measure very minute heart beat electrical signals. However, plain water can also be used to pre-wet the electrodes (2 ribbed oval areas on the reverse side of the belt and both sides of the transmitter). It's also recommended that you wear the transmitter strap a few minutes before your work out. Some users, because of body chemistry, have a more difficult time in achieving a strong, steady signal at the beginning. After "warming up", this problem lessens. As noted, wearing clothing over the transmitter/strap doesn't affect performance.
6. Your workout must be within range - distance between transmitter/receiver – to achieve a strong steady signal. The length of range may vary somewhat but generally stay close enough to the console to maintain good, strong, reliable readings. Wearing the transmitter immediately against bare skin assures you of proper operation. If you wish, you may wear the transmitter over a shirt. To do so, moisten the areas of the shirt that the electrodes will rest upon.

***Note**: The transmitter is automatically activated when it detects activity from the user's heart. Additionally, it automatically deactivates when it does not receive any activity. Although the transmitter is water resistant, moisture can have the effect of creating false signals, so you should take precautions to completely dry the transmitter after use to prolong battery life (estimated transmitter battery life is 2500 hours). The replacement battery is Panasonic CR2032.*

ERRATIC OPERATION

Caution! Do not use this rower for Heart Rate unless a sdy, solid Actual Heart Rate value is being displayed. High, wild, random numbers being displayed indicate a problem.

Areas to look for interference which may cause erratic heart rate:

1. Microwave ovens, TV's, small appliances, etc.
2. Fluorescent lights.
3. Some household security systems.
4. Perimeter fence for a pet.
5. Some people have problems with the transmitter picking up a signal from their skin. If you have problems try wearing the transmitter upside down. Normally the transmitter will be oriented so the is right side up.
6. The antenna that picks up your heart rate is very sensitive. If there is an outside noise source, turning the whole machine 90 degrees may de-tune the interference.
7. Another Individual wearing a transmitter within 3' of your machine's console.

If you continue to experience problems contact your dealer.

WARNING! - DO NOT USE THE HEART RATE PROGRAM IF YOUR HEART RATE IS NOT REGISTERING PROPERLY ON THE ROWER'S DISPLAY!

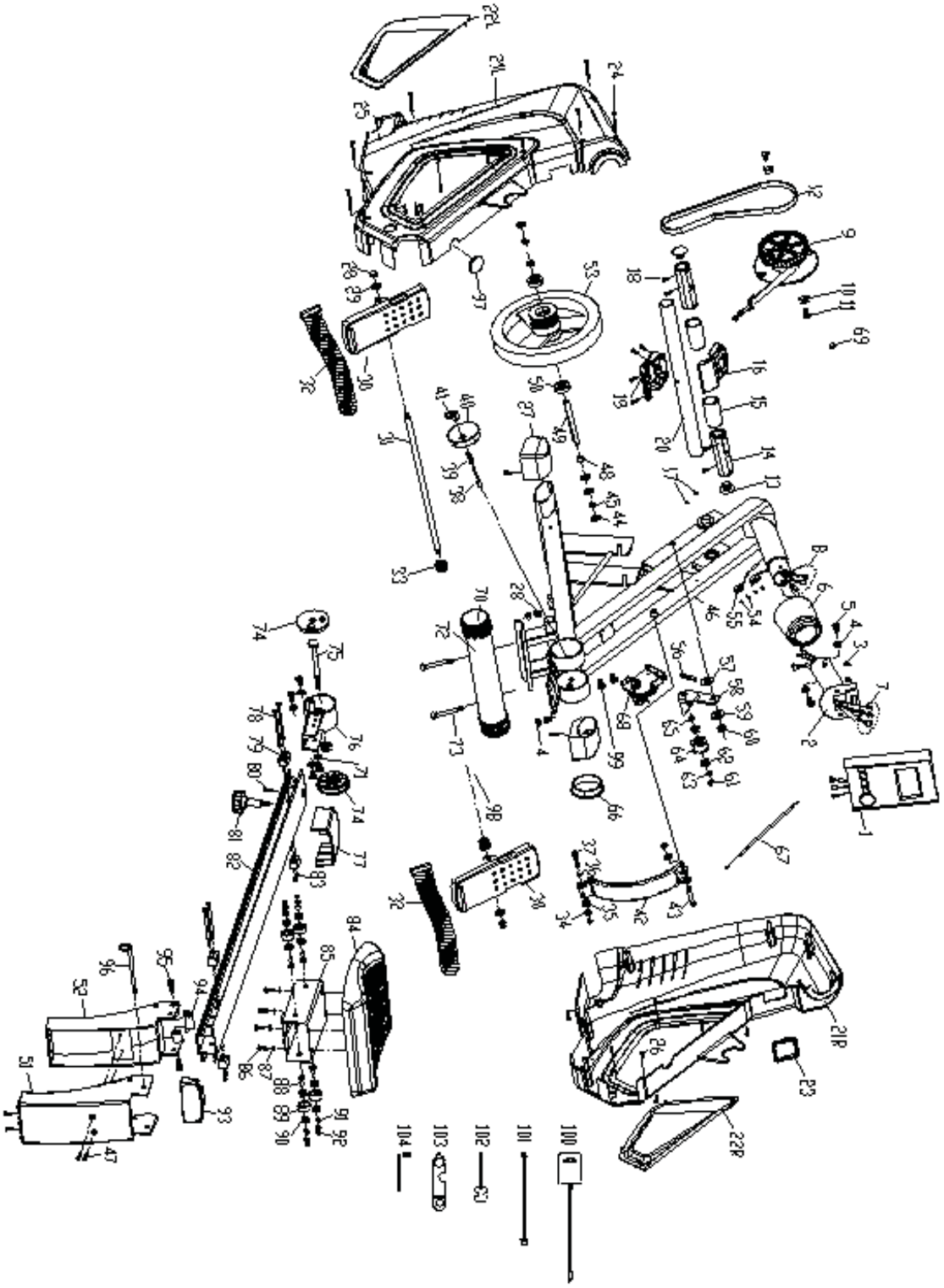
PARTS LIST

KEY NO.	PART NO.	DESCRIPTION	QTY
1	5389901	Computer	1
2	5389902	console mast	1
3	5389903	M5×10L Screw	2
4	5389904	8 x19 x 2T washers	4
5	5389905	Screw	4
6	5389906	console mast cover	1
7	5389907	Extension cable	1
8	5389908	extension sensor wire	1
9	5389909	Spring box	1
10	5389910	Bearing 6000	2
11	5389911	Screw	2
12	5389912	Belt	1
13	5389913	End cup	2
14	5389914	handle pulse	2
15	5389915	Small computer cover	1
16	5389916	Monitor for handle	1
17	5389917	Screw	2
18	5389918	Screw Q235	4
19	5389919	Small computer cover	1
20	5389920	Draw bar	1
21	5389921	Cover（R+L）	1
22	5389922	Side cover（R+L）	1
23	5389923	Small cover	1
24	5389924	Screw M4×50L	6
25	5389925	Screw 3/16"（#10）×3/4"	6
26	5389926	Screw M4×10L	8
27	5389927	Front Stabilizer Cap	2
28	5389928	Cap Nut	4
29	5389929	Flat Washer Φ8.5×Φ22×2T	2
30	5389930	Pedal	2
31	5389931	pedal axis Φ13×416L	1
32	5389932	Pedal strap	2
33	5389933	Sleeve	2
34	5389934	Flat Washer Φ6.5×Φ14×1T	1
35	5389935	nylon spacer Φ6.5×Φ19×1.5T	1
36	5389936	Hex nut M6	1
37	5389937	Bolts M6×P1.25×55L	1
38	5389938	Pin Φ5×Φ8×58L	1
39	5389939	Spring	1

KEY NO.	PART NO.	DESCRIPTION	QTY
40	5389940	Fixing Pin	1
41	5389941	stug head Φ14×20L	1
42	5389942	Magnetic Set	1
43	5389943	Bolts M8×P1.25×80L	1
44	5389944	Nut 3/8”-26×4.5T	5
45	5389945	Washer Φ10	2
46	5389946	Frame	1
47	5389947	Screw	4
48	5389948	Bushing Φ10×Φ14×9mm	1
49	5389949	Flywheel Axle 3/8”-26×120L	1
50	5389950	Bearing 6300RS	2
51	5389951	cover of rear support frame	1
52	5389952	Supporter	1
53	5389953	Flywheel Φ260	1
54	5389954	Screw M3*8L	2
55	5389955	sense box	1
56	5389956	bolts	1
57	5389957	Flat Washer Φ10.5×Φ30×1T	1
58	5389958	Alder Press welding	1
59	5389959	Flat Washer Φ10.5×Φ30×2T	1
60	5389960	Nylon Nut M10	1
61	5389961	Nylon Nut M8	2
62	5389962	Bearing 6000Z	2
63	5389963	Flat Washer Φ8×Φ14×2T	1
64	5389964	Ldlewheel Φ37	1
65	5389965	Wavy Washer Φ10	1
66	5389966	Left end cup	1
67	5389967	Cable	1
68	5389968	Motor	1
69	5389969	M51 magnet	1
70	5389970	End cup	2
71	5389971	Washer Φ8×Φ16×2T	4
72	5389972	middle foot tube	1
73	5389973	Bolts M8 x75L	2
74	5389974	axle sleeve	2

KEY NO.	PART NO.	DESCRIPTION	QTY
75	5389975	Bolts M10×P1.5×90L	1
76	5389976	Track Bracket	1
77	5389977	Protecting cover	1
78	5389978	Bolts M6×90L	2
79	5389979	Buffering Cushion	4
80	5389980	Screw M4×30L	1
81	5389981	Knob	1
82	5389982	Aluminum track	1
83	5389983	Hexnut M6	2
84	5389984	Seat	1
85	5389985	Seat Carriage	1
86	5389986	Screw M6×25L	4
87	5389987	Flat Washer Φ6×Φ13×1T	8
88	5389988	Bolts M6×32L	4
89	5389989	Seat wheel	4
90	5389990	Bearing	8
91	5389991	Bushing Φ6.2×Φ9×9.5m	4
92	5389992	Nylon Nut M6	5
93	5389993	End cap	1
94	5389994	fixed axis Φ16×53.5L	1
95	5389995	Bolts M8×16L	2
96	5389996	Fixing Pin	1
97	5389997	tube plug of cover	1
98	5389998	Screw	4
99	5389999	Screw M5*14L	2
100	53899100	Adaptor	1
101	53899101	DC wire	1
102	53899102	The harpoon wrench	1
103	53899103	N-tool	1
104	53899104	hexagon wrench	1

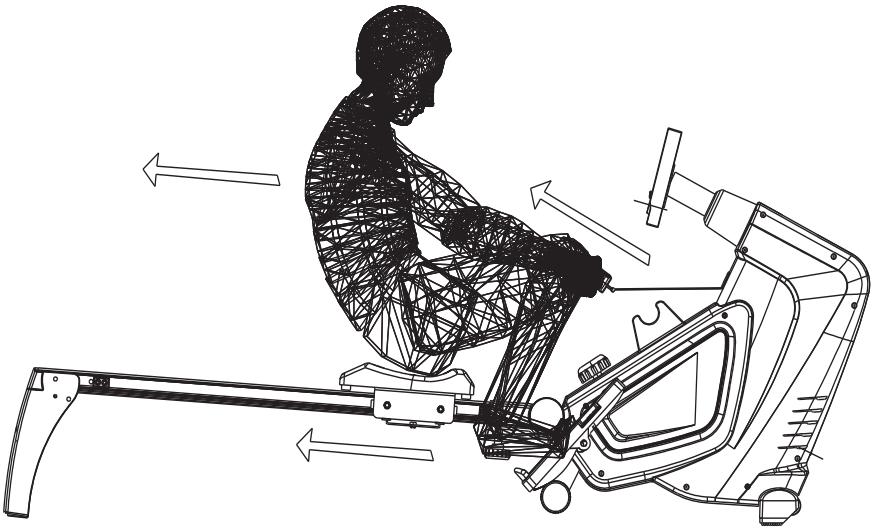
DIAGRAM

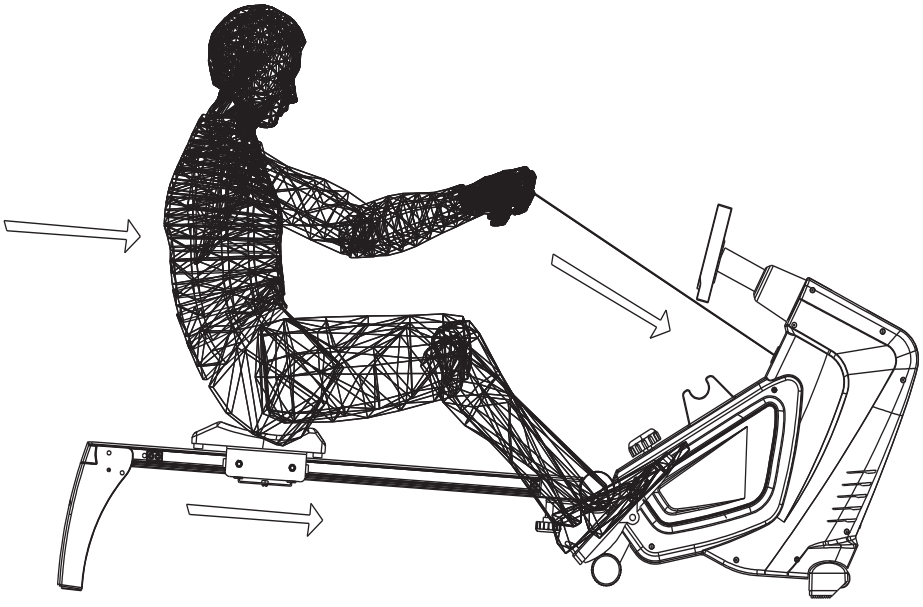


How to Row:

THE COMPLETE ROWING ACTION

This exercise will help tone and strengthen the muscle groups in your legs, arms, shoulders, back and stomach. Start as shown in Fig.1 with the draw bar fully retracted. Slide down on the seat, knees bent and grasp the draw bar. Slowly move backwards, keeping a straight back, extending the legs and pulling the draw bar towards your chest. Return to the start position and repeat.





Trouble Shooting

Problem	*Cause*	*Correction*
Monitor doesn't display	Power supply doesn't connect well between monitor and wall power.	Insert the plug of adaptor into the wall supply.
No speed or distance displays on the monitor	Sending unit not connected	Securely plug sending unit into the socket of monitor
	Sending unit not working properly	Replace sending unit
	Monitor not working properly	Replace monitor
No tension Tension is no difference	Belt drops off the gear of pivot shaft.	Put the belt back on the gear of pivot shaft
	Resistant cable doesn't connect the motor	Connect the resistant cable to the motor.
	Motor is damaged.	Change motor.

TRAINING GUIDELINES

Exercise
Exercise is one of the most important factors in the overall health of an individual. Listed among its benefits are:

- Increased capacity for physical work (strength endurance)
- Increased cardiovascular (heart and arteries/veins) and respiratory efficiency
- Decreased risk of coronary heart disease
- Changes in body metabolism, e.g. losing weight
- Delaying the physiological effects of age
- Physiological effects, e.g. reduction in stress, increase in self-confidence, etc.

Basic Components of Physical Fitness
There are four all encompassing components of physical fitness and we need to briefly define each and clarify its role.

Strength is the capacity of a muscle to exert a force against resistance. Strength contributes to power and speed and is of great importance to a majority of sports people.

Muscular Endurance is the capacity to exert a force repeatedly over a period of time, e.g. it is the capacity of your legs to carry you 10 Km without stopping.

Flexibility is the range of motion about a joint. Improving flexibility involves the stretching of muscles and tendons to maintain or increase suppleness, and provides increased resistance to muscle injury or soreness.

Cardio-Respiratory Endurance is the most essential component of physical fitness. It is the efficient functioning of the heart and lungs

Aerobic Fitness
The largest amount of oxygen that you can use per minute during exercise is called your maximum oxygen uptake (MVo2). This is often referred to as your aerobic capacity.
The effort that you can exert over a prolonged period of time is limited by your ability to deliver oxygen to the working muscles. Regular vigorous exercise produces a training effect that can increase your aerobic capacity by as much as 20 to 30%. An increased MVO2 indicates an increased ability of the heart to pump blood, of the lungs to ventilate oxygen and of the muscles to take up oxygen.

Anaerobic Training
This means “without oxygen” and is the output of energy when the oxygen supply is insufficient to meet the body’s long term energy demands. (For example, 100 meter sprint).

The Training Threshold
This is the minimum level of exercise which is required to produce significant improvements in any physical fitness parameter.

Progression
As your become fitter, a higher intensity of exercise is required to create an overload and therefore provide continued improvement

Overload
This is where you exercise at a level above that which can be carried out comfortably. The intensity, duration and frequency of exercise should be above the training threshold and should be gradually increased as the body adapts to the increasing demands. As your fitness level improves, so the training threshold should be raised.
Working through your program and gradually increasing the overload factor is important.

Specificity
Different forms of exercise produce different results. The type of exercise that is carried out is specific both to the muscle groups being used and to the energy source involved.
There is little transfer of the effects of exercise, i.e. from strength training to cardiovascular fitness. That is why it is important to have an exercise program tailored to your specific needs.

Reversibility
If you stop exercising or do not do your program often enough, you will lose the benefits you have gained. Regular workouts are the key to success.

Warm Up
Every exercise program should start with a warm up where the body is prepared for the effort to come. It should be gentle and preferably use the muscles to be involved later.
Stretching should be included in both your warm up and cool down, and should be performed after 3-5 minutes of low intensity aerobic activity or callisthenic type exercise.

Warm Down or Cool Down
This involves a gradual decrease in the intensity of the exercise session. Following exercise, a large supply of blood remains in the working muscles. If it is not returned promptly to the central circulation, pooling of blood may occur in the muscles

Heart Rate
As you exercise, so the rate at which your heart beat also increases. This is often used as a measure of the required intensity of exercise. You need to exercise hard enough to condition your circulatory system, and increase your pulse rate, but not enough to strain your heart.
Your initial level of fitness is important in developing an exercise program for you. If you are starting off, you can get a good training effect with a heart rate of 110-120 beats per minute(BPM). If you are fitter, you will need a higher threshold of stimulation.
To begin with, you should exercise at a level that elevates your heart rate to about 65 to 70% of your maximum. If you find this is too easy, you may want to increase it, but it is better to lean on the conservative side.
As a rule of thumb, the maximum heart rate is 220 minus your age. As you increase in age, so your heart, like other muscles, loses some of its efficiency. Some of its natural loss is won back as fitness improves.
The following table is a guide to those who are “starting fitness”.

Age	25	30	35	40	45	50	55	60	65
Target heart Rate									
10Second Count	23	22	22	21	20	19	19	18	18
Beats per Minute	138	132	132	126	120	114	114	108	108

Pulse Count
The pulse count(on your wrist or carotid artery in the neck, taken with two index fingers)is done for ten seconds, taken a few seconds after you stop exercising. This is for two reasons: (a) 10 seconds is long enough for accuracy, (b) the pulse count is to approximate your BPM rate at the time you are exercising. Since heart rate slows as you recover, a longer count isn’t as accurate.

The target is not a magic number, but a general guide. If you’re above average fitness, you may work quite comfortably a little above that suggested for your age group.
The following table is a guide to those who are keeping fit. Here we are working at about 80% of maximum.

Age	25	30	35	40	45	50	55	60	65
Target heart Rate									
10Second Count	26	26	25	24	23	22	22	21	20
Beats per Minute	156	156	150	144	138	132	132	126	120

Don’t push yourself too hard to reach the figures on this table. It can be very uncomfortable if you overdo it. Let it happen naturally as you work through your program. Remember, the target is a guide, not a rule, a little above or below is just fine.
Two final comments:(1) don’t be concerned with day to day variations in your pulse rate, being under pressure or not enough sleep can affect it;(2) your pulse rate is a guide, don’t become a slave to it.

Endurance Circuit Training
Cardiovascular endurance, muscle, strength, flexibility and coordination are all necessary for maximum fitness. The principle behind circuit training is to give a person all the essentials at one time by going through your exercise program moving as fast as possible between each exercise. This increases the heart rate and sustains it, which improves the fitness level. Do not introduce this circuit training effect until you have reached an advanced program stage.

Body Building
Is often used synonymously with strength training The fundamental principal here is OVERLOAD. Here, the muscle works against greater loads than usual. This can be done by increasing the load you are working against.

Patronization
This is the term used to vary your exercise program for both physiological and psychological benefits. In your overall program, you should vary the workload, frequency and intensity. The body responds better to variety and so do you. In addition, when you feel yourself getting “stale’, bring in periods of lighter exercise to allow the body to recuperate and restore its reserves. You will enjoy your program more and feel better for it.

Muscle Soreness
For the first week or so, this may be the only indication you have that you are on an exercise program. This, of course, does depend on your overall fitness level. A confirmation that you are on the correct program is a very slight soreness in most major muscle groups. This is quite normal and will disappear in a matter of days.
If you experience major discomfort, you may be on a program that is too advanced or you have increased your program too rapidly.
If you experience PAIN during or after exercise, your body is telling your something.
Stop exercising and consult your doctor.

What to Wear
Wear clothing that will not restrict your movement in any way while exercising. Clothes should be light enough to allow the body to cool. Excessive clothing that causes you to perspire more than you normally would while exercising, gives you no advantage. The extra weight you lose is body fluid and will be replaced with the next glass of water you drink. It is advisable to wear a pair of gym or running shoes or “sneakers”.

Breathing during Exercise
Do not hold your breath while exercising. Breathe normally as much as possible. Remember, breathing involves the intake and distribution of oxygen, which feeds the working muscles.

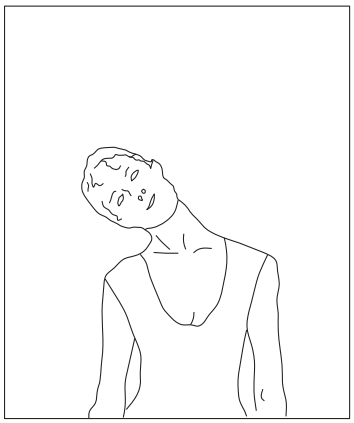
Rest periods
Once you start your exercise program, you should continue through to the end. Do not break off halfway through and then restart at the same place later on without going through the warm-up stage again.
The rest period required between strength training exercises may vary from person to person. This will depend mostly on your level of fitness and the program you have chosen. Rest between exercises by all means, but do not allow this to exceed two minutes. Most people manage with half minute to one minute rest periods

STRETCHING

Stretching should be included in both your warm up and cool down, and should be performed after 3-5 minutes of low intensity aerobic activity or callisthenic type exercise. Movements should be performed slowly and smoothly, with no bouncing or jerking. Move into the stretch until slight tension, not pain, is felt in the muscle and hold for 20-30 seconds. Breathing should be slow, rhythmical and under control, making sure never to hold your breath.

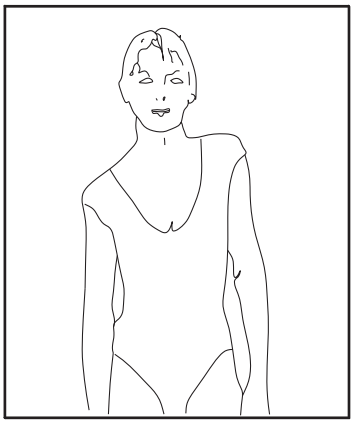
HEAD ROLLS

Rotate your head to the right for one count, feeling the stretch up the left side of your neck. Next 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 finally, drop your head to your chest for one count.



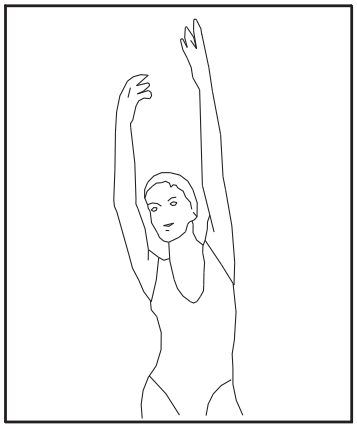
SHOULDER LIFTS

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



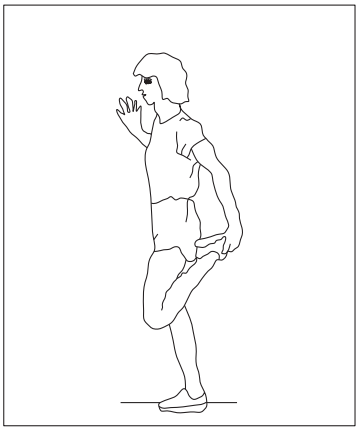
SIDE STRETCHES

Open your arms to the side and continue lifting them until they are over your head. Reach your right arm as far upward toward the ceiling as you can for one count. Feel the stretch up your right side. 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 up.

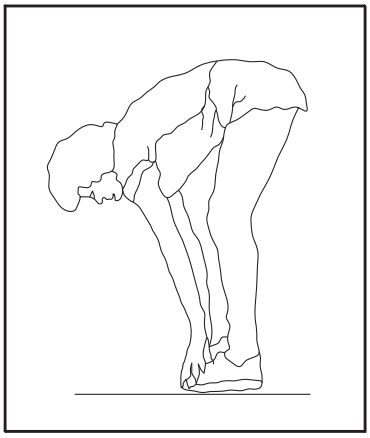


INNER THIGH STRETCH

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

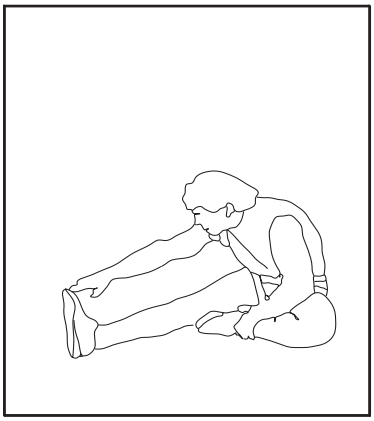
TOE TOUCHES

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



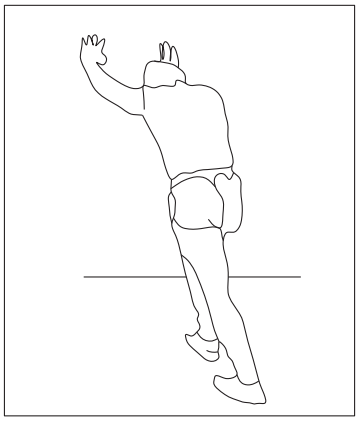
HAMSTRING STRETCHES

Sit with your right leg extended. 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 extended.



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.



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