# OWNER'S MANUAL

Model No. 16805132000

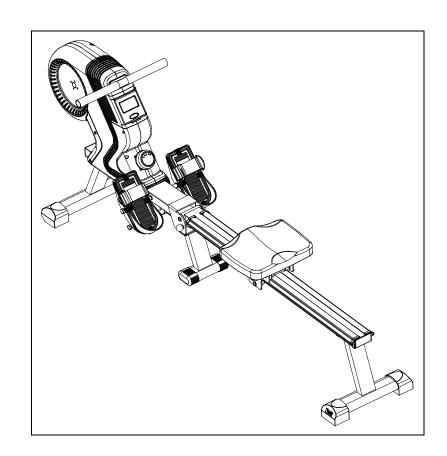
- Assembly
- Operation
- Exercise
- Parts
- Warranty

#### **CAUTION:**

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



## EV200 MAGNETIC ROWER



### **Manufacturer's One-Year Limited Warranty**

Your **EVERLAST** Rower 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 it 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.

Frame: 1 year Parts: 1 year

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

The warranty shall not apply to exercise units that are (1) used for commercial or other income producing purposes or (2) subject to misuse, neglect, accident or unauthorized repair and alterations.

This warranty provided herein is lieu of all other express warranties; any implied warranties, including any implied warranties of merchantability of fitness for particular purpose, are limited in duration to the first 12 months from date of purchase. All other obligations or liabilities, including liability for consequential damages, are hereby excluded. The warranty registration can be completed online: Go to <a href="https://www.dyaco.ca/warranty.html">www.dyaco.ca/warranty.html</a> and complete the online warranty registration.

#### REPAIR PARTS AND SERVICE

All of the parts for the Rower, shown in figure, can be ordered from Dyaco Canada Inc. 5955 DON MURIE STREET, NIAGARA FALLS, ONTARIO L2G 0A9. 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 <a href="mailto:customerservice@dyaco.ca">customerservice@dyaco.ca</a> or visit us at: <a href="mailto:www.dyaco.ca">www.dyaco.ca</a>. 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

#### **TABLE OF CONTENTS**

WARRANTY	2	SET UP INSTRUCTIONS	17
SAFETY PRECAUTION	3	FUNCTION INSPECTION	18
BEFORE YOU BEGIN	4	FOLDING INSTRUCTIONS	19
PRE-ASSEMBLY CHECK LIST	5	USER DIRECTION	20
HARDWARE PACKING LIST	6	MAINTENANCE	20
ASSEMBLY INSTRUCTIONS	7-12	TROUBLESHOOTING	21
PARTS LIST	13-15	GENERAL MAINTENANCE	22
DIAGRAM	15	TRAINING GUIDELINES	23-26
MONITOR INSTRUCTIONS	16-17	STRETCHING	27-28
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Customer Service 1-888-707-1880 Or email customerservice@dyaco.ca

## 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 300lbs (136KG).
- 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 bare 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.

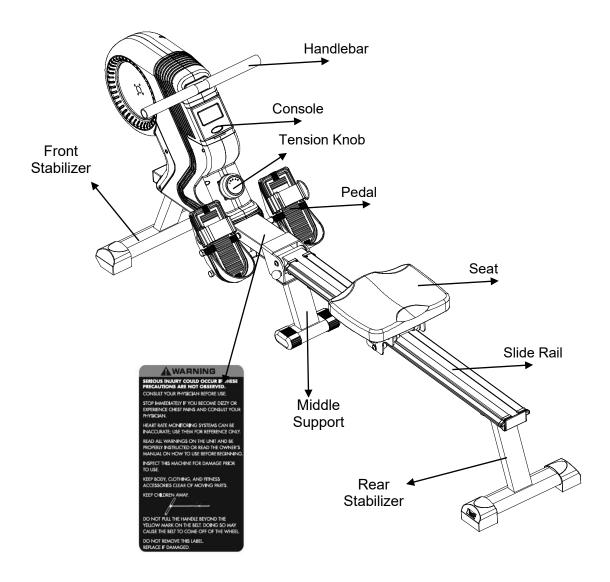
MARNING: Before beginning any exercise program, consult your physician. This is especially important for individuals over the age of 35 or persons with pre-existing health problems. Read all instructions before using any fitness equipment. We assume no responsibility for personal injury or property damage sustained by or through the use of this product.

SAVE THESE INSTRUCTIONS

#### **BEFORE YOU BEGIN**

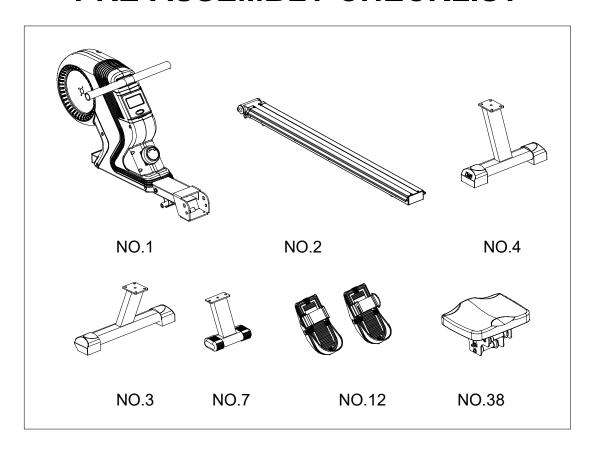
Thank you for choosing the Everlast Rower. We take great pride in producing this quality product and hope it will provide many hours of quality exercise to make you feel better, look better, and enjoy life to its fullest. It's a proven fact that a regular exercise program can improve your physical and 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.

For your benefit, read this manual carefully before you use the rower. If you have questions after reading this manual, please see the front cover of this manual. To help us assist you, note the product model number and serial number before contacting us. The model number and the location of the serial number decal are shown on the warning label of the rower. Before reading further, please familiarize yourself with the parts that are labelled in the drawing below.



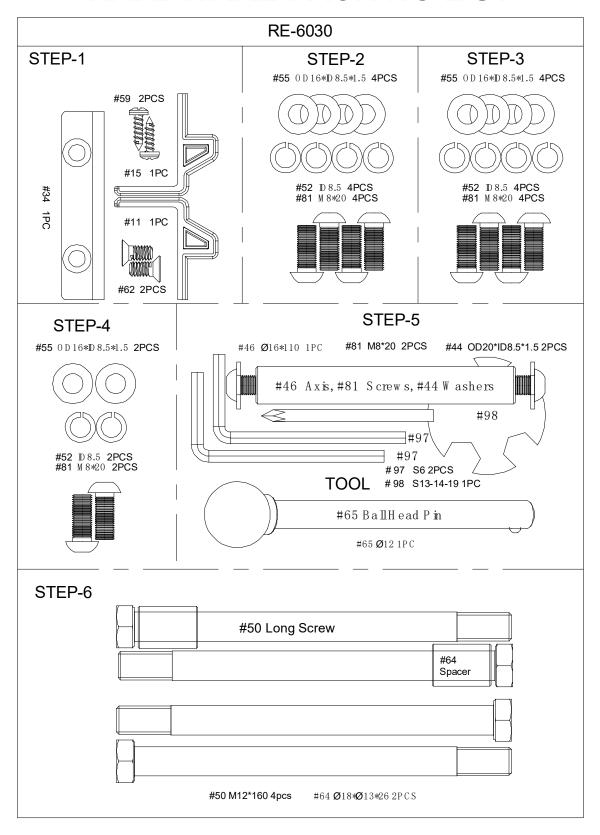
The decal shown above has been placed on the rower. If the decal is missing or illegible, please call our Customer Service Department toll-free at 1-888-707-1880 to order a replacement decal.

## PRE-ASSEMBLY CHECKLIST



PART NO.	DESCRIPTION	Q'TY
1	Main Frame	1
2	Slide Rail	1
3	Front Stabilizer	1
4	Rear Stabilizer	1/1
7	Middle Support	1
12	Pedal	1
38	Seat	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.

## **ASSEMBLY INSTRUCTIONS**

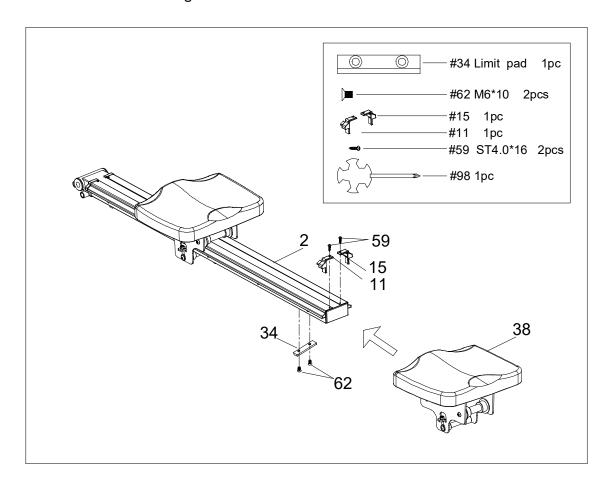
This manual is designed to help you easily assemble, adjust and use this machine. Please read this manual carefully for the sake of familiarizing yourself with the parts identified in the instruction, first study the overview drawing.

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.

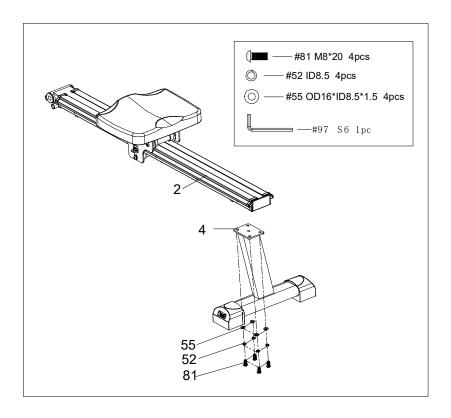
It will take two people to assemble your unit.

## ENSURE THAT ALL NUTS AND BOLTS ARE FIRMLY TIGHTENED AFTER EACH STEP

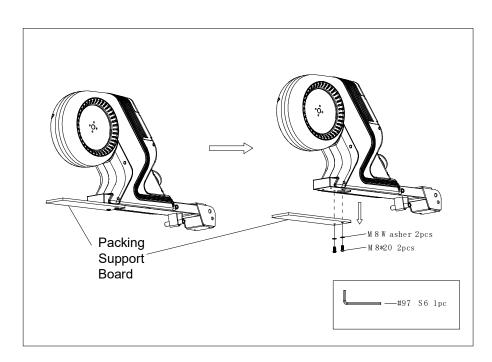
- 1. Slide the **Seat Assembly (38)** onto the **Seat Rail (2)**. Make sure that the seat faces the hinge.
- 2. Use 2 M6 x 10 Button Head Screws (62) to secure the Limit Pad (34) to the Slide Rail (2).
- 3. Secure the **Stop Brackets (11, 15)** to the **Seat Rail (2)** using 2 **ST4.0 x 16 Screws (59)** to prevent the seat from sliding off the rail.



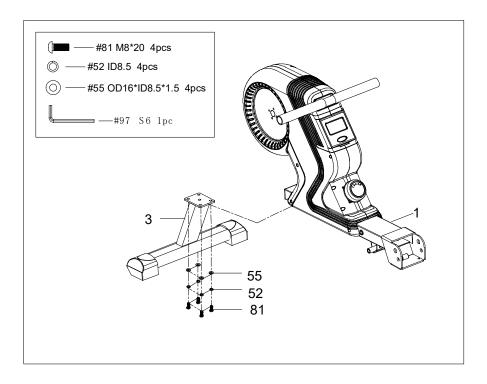
1. Attach the Rear Stabilizer (4) to the Slide Rail (2). Secure using 4 Bolts (81), 4 Spring Washers (52), and 4 Washers (55) with the provided Allen Wrench (97).



- 1. A piece of plywood has been attached to the Main Frame (1) to stabilize it during shipping.
- 2. Remove the 2 Bolts and 2 Washers using the Allen Wrench (97).
- 3. The plywood, bolts, and washers are not needed in further assembly and can be recycled.

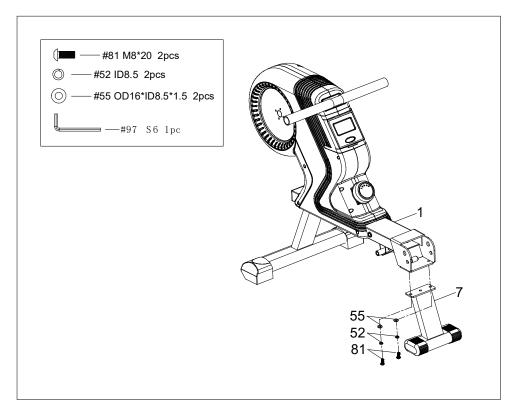


1. Attach the Front Stabilizer (3) to the Main Frame (1). Secure using 4 Bolts (81), 4 Spring Washers (52), and 4 Washers (55) with the provided Allen Wrench (97).

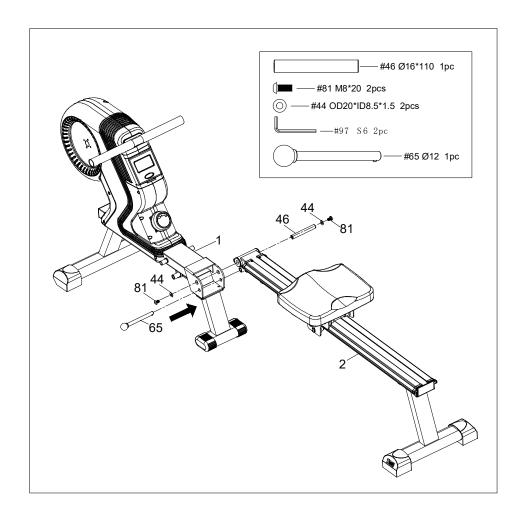


#### STEP 5

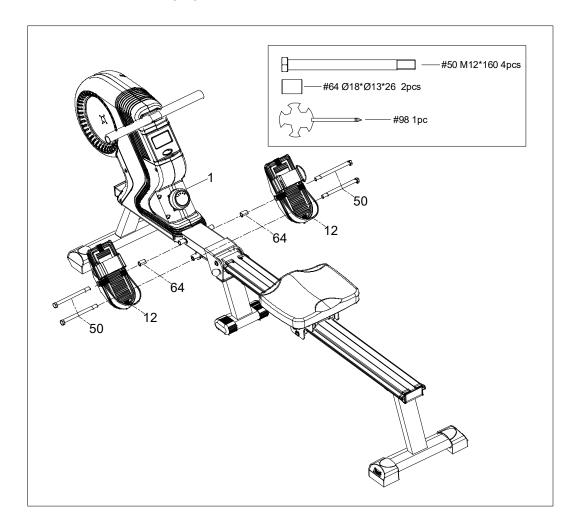
1. Attach the Middle Support (7) to the Main Frame (1). Secure using 2 Bolts (81), 2 Spring Washers (52), and 2 Washers (55) with the provided Allen Wrench (97).



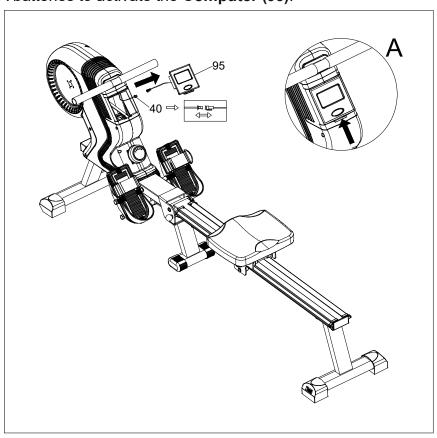
- 1. Attach the Slide Rail (2) to the Main Frame (1). Insert the Rail Shaft (46) and secure using 2 Bolts (81) and 2 Washers (44) with the provided Allen Wrench (97).
- 2. Insert the **Ball Head Pin (65)** into the lower slot on the **Main Frame (1) & Slide Rail (2)**. Lift center of frame to help line up locking pin holes. This locks the rower in the unfolded position and can be removed to fold the rower up.



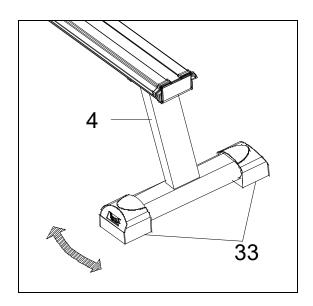
- 1. Slide the Outer Hexagonal Screw (50) through the Pedal (12), then through a Pedal Bushing (64) before attaching and securing to the Main Frame (1) using the Spanner (98). A second Outer Hexagonal Screw (50) is directly secured onto the Main Frame (1) in the lower half of the Pedal (12).
- 2. Repeat for the other Pedal (12).



- 1. To insert/remove batteries, the Computer (95) can be removed from the Main Frame (1).
- 2. Pop the Computer (95) out via the hinge (shown above) and be careful not to damage the connection wires. Unclip the wires, and the Computer (95) can be moved around freely. Insert the 2 AA batteries to activate the Computer (95).



You have completed the assembly of your rower. Your rower is equipped with adjustable end caps. If the unit is wobbly, please turn the levelling caps on the rear stabilizer to level the unit.



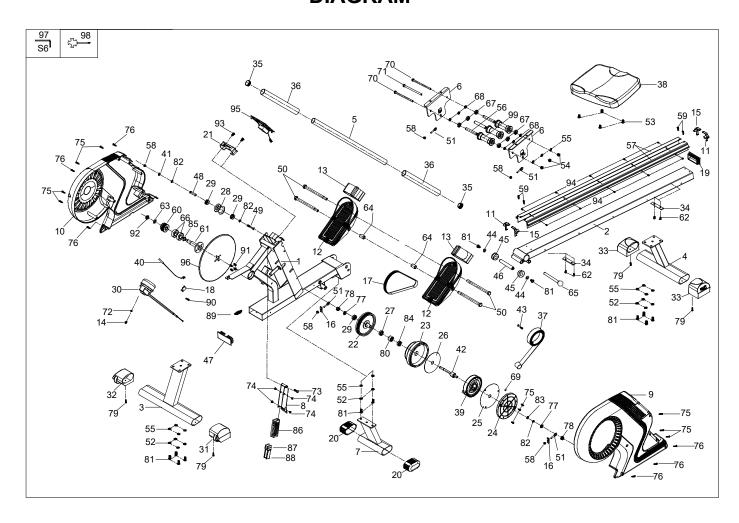
## **PARTS LIST**

No.	Part No.	Description	Qty
1	132001	Main Frame	1
2	132002	Slide Rail	1
3	132003	Front Stabilizer	1
4	132004	Rear Stabilizer	1
5	132005	Handlebar	1
6	132006	Seat Carriage	2
7	132007	Middle Support	1
8	132008	Magnet Bracket	1
9	132009	Chain Cover L	1
10	132010	Chain Cover R	1
11	132011	Stop Brackets R	2
12	132012	Pedal	2
13	132013	Pedal Strap	2
14	132014	Crosshead Screw M5*15	1
15	132015	Stop Brackets L	2
16	132016	Adjusting U-shaped plate	2
17	132017	Belt 6PJ330	1
18	132018	Sensor Bracket	1
19	132019	Square end cap □ 40*80	1
20	132020	Oval Plug 40*80	2
21	132021	Handlebar Seat	1
22	132022	Belt Pulley	1
23	132023	Drawstring Pulley	1
24	132024	Spring Cover	1
25	132025	Soundproof Board A Φ142*Φ16*0.5	1
26	132026	Soundproof Board B Φ119*Φ16*0.5	1
27	132027	Bearing 6003	1
28	132028	Belt Wheel	1
29	132029	Bearing 6000ZZ	3
30	132030	Tension Knob	1
31	132031	Front Stabilizer End Cap L	1
32	132032	Front Stabilizer End Cap R	1
33	132033	Rear Stabilizer End Cap	2
34	132034	Limit Pad	2
35	132035	Handle End Cap	2
36	132036	Foam Grip Φ33*3*215	2
37	132037	Meshbelt	1
38	132038	Seat	1
39	132039	Volute Spring	1
40	132040	Sensor Wire	1
41	132041	Washer OD12*ID6.5*1.5	1
42	132042	Shaft for Drawstring pulley	1

No.	Part No.	Description	Qty
43	132043	Crosshead Screw M5*35	1
44	132044	Washer OD20*ID8.5*1.5	2
45	132045	Rail Bushing Φ38*Φ16*15	2
46	132046	Rail Shaft Φ16*110	1
47	132047	Square Plug 40*100	1
48	132048	Spacer for Belt Wheel Φ10*Φ6.1*40	1
49	132049	Outer Hexagonal Screw M6*55	1
50	132050	Outer Hexagonal Screw M12*Φ12.5*160	4
51	132051	Adjusting Bolt M6*40	4
52	132052	Spring Washer ID8.5*1.5	10
53	132053	Bolt M6*15	4
54	132054	Nylon Nut M8	3
55	132055	Washer OD16*ID8.5*1.5	13
56	132056	Bushing for Seat Roller Φ12.7*1.4*78	3
57	132057	Aluminum Plate	2
58	132058	Nylon Nut M6	5
59	132059	Crosshead Screw ST4.0*16	4
60	132060	Small Pulley Ф43*26*M16	1
61	132061	Flywheel Axle	1
62	132062	Flat Head Screw M6*10	4
63	132063	Washer OD20*ID10.5*2	1
64	132064	Pedal Bushing Φ18*Φ13*26	2
65	132065	Ball head Pin Φ11*106	1
66	132066	Bearing 6004	2
67	132067	Bearing 608ZZ	6
68	132068	Spacer for Seat Roller Φ12.7*Φ8.2*13	6
69	132069	Magnet Φ10*2	1
70	132070	Bolt M8*140	2
71	132071	Bolt M8*145	1
72	132072	Washer OD11*ID5.5*1.5	1
73	132073	Bolt M6*45	1
74	132074	Flat Head Screw ST5.0*10	4
75	132075	Crosshead Screw ST4.0*19	10
76	132076	Crosshead Screw ST4.0*16	6
77	132077	Hexagon Nut M10*1.0	2
78	132078	Flange Nut M10*1.0	2
79	132079	Crosshead Screw ST4.0*25	4
80	132080	One-way Bearing HR1712	1
81	132081	Bolt M8*20	12
82	132082	C Clip	3
83	132083	Wave Washer OD13.5*ID10.2*0.4	1
84	132084	Bearing 16003	1

No.	Part No.	Description	Qty
85	132085	Wave Washer OD27.2*ID20.8*T0.4	1
86	132086	Magnetic Base	1
87	132087	Small Strong Magnetic 10*20*5	4
88	132088	Big Strong Magnetic 20*50*5	2
89	132089	Drag Spring Ø14*1.5*55	1
90	132090	Crosshead Screw ST4.0*12	1
91	132091	Bolt M6*12	4
92	132092	Nylon Nut M10	1
93	132093	Crosshead Screw M5*12	2
94	132094	Flat Head Screw M4*12	10
95	132095	Computer	1
96	132096	Flywheel	1
97	132097	Allen Wrench	2
98	132098	Spanner	1
99	132099	Seat Roller	3

### **DIAGRAM**



## COMPUTER INSTRUCTIONS



### **Functions and Operations**

#### **Batteries Installation**

Please install 2 AA batteries in the battery case on the back of the Console (95). (Whenever batteries are removed, all values will be reset to zero.)

#### Auto On/Off

Whenever a user starts to do exercise, the display will light up and show the workout values automatically. After 4.5 minutes of no exercise input, the display will shut off. When a user begins to exercise again, the workout values will continue from where they left off. (Holding the MODE button for 2 seconds will cause all the values, except odometer, to reset to zero.)

#### **Auto Scan**

After the Console (95) is powered on or when the Mode button is pressed, the display will cycle through all functions values "Time - Distance - Calories - SPM - Pulse." Each value will be held for 6 seconds.

#### Distance

Displays the distance from 0 to 9999 meters. In "Autoscan" mode, the value will hold for 6 seconds before continuing to the next value, users also can press the MODE button to cycle through the other values until the ARROW icon ◀ points to display the distance value. This will end "Autoscan" mode, and only the selected value will display continuously.

#### Time

Displays the workout time from 00:00 to 99:59. Users can press the MODE button to cycle through the other values until an ARROW icon ◀ points to "Time" to display the workout time value.

#### Count

Displays the step from 0 to 9999. Users also can press the Mode button to cycle through the other values until an ARROW icon ▶ points to "Count."

#### **Calories**

Displays the calories burned during training from 0.0 to 9999. Users also can press the MODE button to cycle through other values until an ARROW icon ◀ points the calories.

#### **SPM**

Displays current Strokes Per Minute from 0 to 120. Users also can press the MODE button to cycle through the other values until an ARROW icon ◀ points to display "SPM."

#### **Pulse**

Displays the current heart rate in beats per minute. Users also can press the MODE button to cycle through other values until an ARROW icon ▶ points to display "Pulse."

#### Reset

Hold the button for 2 seconds. All the function values, except odometer, will be reset to zero.

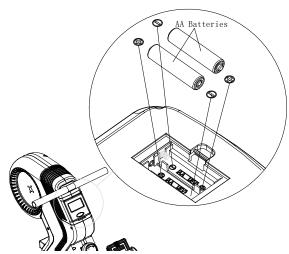
#### Note:

If the console displays abnormally, please re-install the batteries and try again. Please properly dispose of your batteries after use.

Customer Service 1-888-707-1880

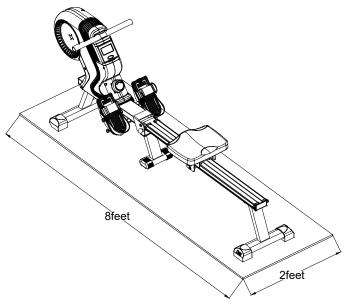
#### **HOW TO INSTALL AND REPLACE BATTERIES**

- 1. Open the Battery Door on the back of the monitor.
- 2. The monitor operates with two AA batteries; the batteries are not included. Refer to the illustration to install or replace the batteries.
- 3. Do not mix a new battery with an old battery.
- 4. Use the same type of battery. Do not mix an alkaline battery with another type of battery.
- 5. Rechargeable batteries are not recommended



#### SET UP INSTRUCTIONS

Place the Everlast rower in the area where it will be used. It is recommended that the Everlast rower be placed on an equipment mat. The Everlast rower is approximately 80 inches long x 20 inches wide x 30 inches tall. (These dimensions may vary up to one inch.) An area 4 feet wide x 8.5 feet long is required for safe operation of the Everlast rower. Make sure that adequate space is available for access to and passage around the Everlast rower.



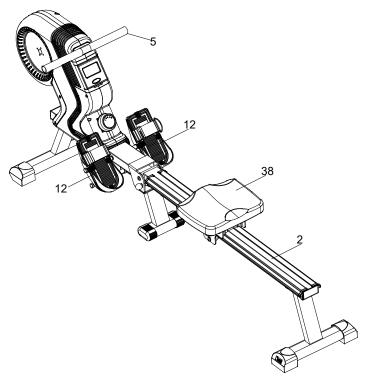
#### **FUNCTION INSPECTION:**

Visually inspect the Everlast rower to verify that assembly is as shown in the illustration below. Check the function of the Everlast rower by pulling the handlebar w/rope (5) slowly through one complete revolution to verify that the drive train functions properly. Adjust the TENSION KNOB (30) and verify that it functions properly.

**CAUTION**: Locate and read the CAUTION LABEL on Everlast rower. Make sure that all users read the CAUTION LABEL before using the product.

#### **FUNCTION INSPECTION**

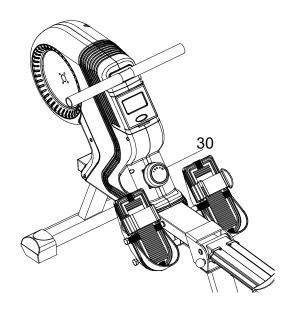
**Rowing:** Sit on the seat (38), secure your feet in the FOOT PEDALS (12) and pull on the HANDLEBAR(5). The seat will slide on the slide rail (2) as you pull and retract the handlebar.



#### **LOAD ADJUSTMENT**

To increase the load, turn the TENSION KNOB (30) clockwise. To decrease the load, turn the TENSION

KNOB (30) counterclockwise. There are eight levels for the load adjustment. Note: The load will increase as you row faster.



#### **FOLDING INSTRUCTIONS**

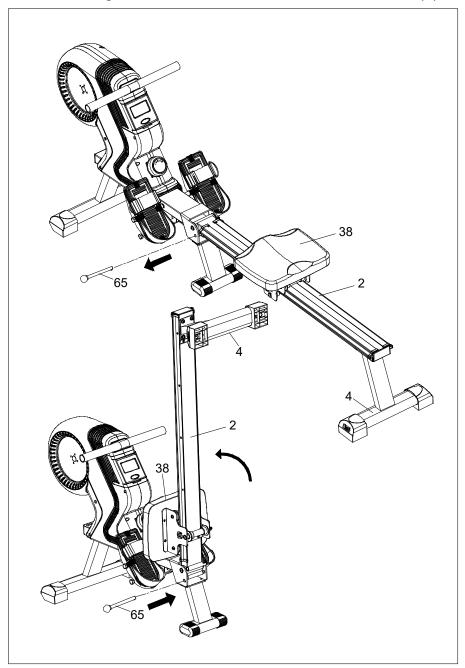
When not in use, the rower can be folded to save space.

You can fold the rower by locating the Ball Head Pin (65) on the Slide Rail (2) and removing it. Then, take the Slide Rail (2) and move it into a vertical position.

**CAUTION:** The Seat (38) will glide down when the Slide Rail (2) is raised. Also, take care to avoid the Rear Stabilizer (4) when moving the Slide Rail (2).

Once the Slide Rail (2) is in the vertical position, re-insert the Ball Head Pin (65) into its slot on the Slide Rail (2). This locks the rower into the folded position.

**CAUTION:** The Slide Rail (2) will not stay in the vertical position before the Ball Head Pin (65) is inserted. Make sure to not let go of it before it is secured, or the Slide Rail (2) may fall.

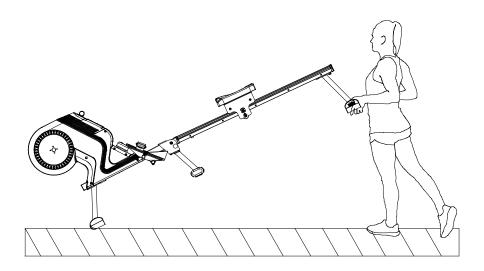


#### **USER DIRECTION**

#### **HOW TO MOVE THE ROWER**

To move the machine, lift up the rear stabilizer until the transportation wheels on the front stand touch the ground.

With the wheels on the ground, you can transport the rower to the desired location with ease.



#### **HOW TO ADJUST THE PEDAL STRAP**

To adjust the pedal strap, remove the Velcro end of the strap from the mesh side by pulling it upward, then to the left.

Once removed, you may increase the opening of the pedal strap by pulling the mesh end up and to the right.

To tighten, pull the Velcro end of the pedal strap upward then to the right and down to secure it to the mesh side of the strap.



#### **MAINTENANCE**

The safety and integrity designed into the 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 TENSION KNOB (30) and verify that the Magnetic Brake System provides tension. The Magnetic Brake System should provide many years of use.
- 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 rower removed from service until repair is made.
- 7. Only Dyaco Canada supplied components shall be used to maintain/repair the rower.
- 8. Keep your Everlast rower clean by wiping it off with an absorbent cloth after use.

## **TROUBLESHOOTING**

Problem	Cause	Solution
Maritandana di Wal	Battery not Installed	Install battery
Monitor does not display	Sensor wire not connected	Ensure the sensor wire is connected properly to the computer
	Sensor wire not connected	Ensure the sensor wire is connected properly to the computer
No speed or count displays on the monitor	Sensor wire not working properly	Replace sensor wire
	Monitor not working properly	Replace monitor
	Magnetic assembly not working properly	Replace magnetic wheel assembly
No tension	Tension knob defective	Replace the tension knob
	Tension needs Adjustment	Turn tension adjustment knob accordingly
Crindina Naisa	Idler pulley defective	Replace idler pulley
Grinding Noise	Flywheel defective	Replace flywheel
Squealing	V-belt slipping	Adjust v-belt

## **GENERAL MAINTENANCE**

The safety of this product can be maintained only if regular periodic checks are made. Most checks can be performed once a week. However, some checks should be made before each workout and are indicated as such below.

#### Checks

- Check that pedals hardware is secure; hardware can work loose over time.
- Check that stabilizer bolts are tight; check before each workout.
- Check that sliding rail is secure; if not, tighten, check before each workout.
- Should a part become defective, replace it immediately. Do not allow use of the equipment until it has been repaired.

#### Cleaning

A damp cloth is sufficient to clean most surfaces of this unit. Be careful not to drip water on the monitor. A mild liquid soap may be added if needed.

#### **HOW TO ADJUST THE DRIVE BELT**

If you can feel the flywheel slip while you are pulling, even when the resistance is adjusted to the highest level, the drive belt may need to be adjusted.

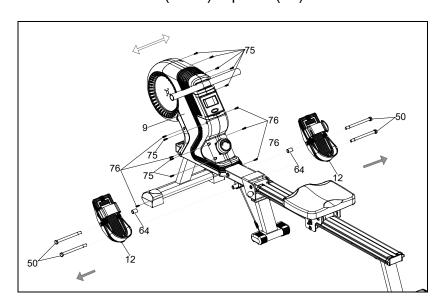
To adjust the drive belt, the pedal (12) & the chain cover (9&10) must first be removed.

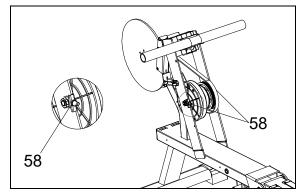
The first step to remove the two sets of Outer Hexagonal Screw (50) and Pedal Bushing (64).

The second step to remove the Crosshead Screw (75&76) from each side of chain cover.

The third step is to loose or tighten the nut (58) to adjust the belt tension.

The last step is attach the chain covers (9&10) & pedal (12) to mainframe.





## 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 sportspeople.

**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 an 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 o the central circulation, pooling of blood may occur in the muscles

#### Heart Rate

As you exercise, so the rate at which your heartbeat 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."

ine renewing table	9.								
Age Target heart Rate	25	30	35	40	45	50	55	60	65
10 Second 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 for those who are keeping fit. Here we are working at about 80% of maximum.

Age	25	30	35	40	45	50	55	60	65
Tärget heart Rate	_				-				
10 Šecond 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 principle 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 about 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 you 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.

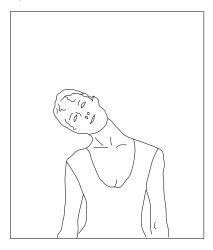
The rest period required between strength training exercises may vary from person to person. This will depend mostly on your level of fitness and the program you have chosen. Rest between exercises by all means, but do not allow this to exceed two minutes. Most people manage with half minute to one minute 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.

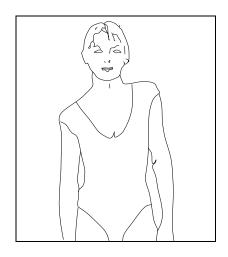
#### **HEAD ROLLS**

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.



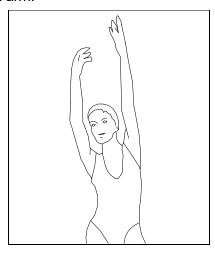
#### **SHOULDER LIFTS**

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.



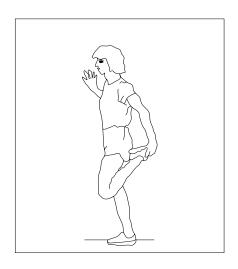
#### **SIDE STRETCHES**

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.



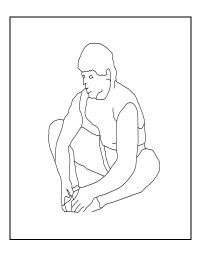
#### QUADRICEPS STRETCH

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.



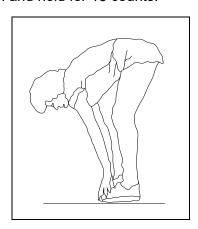
#### **INNER THIGH STRETCH**

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.



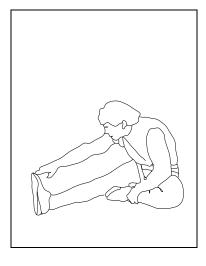
#### **TOE TOUCHES**

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.



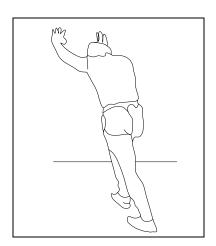
#### **HAMSTRING STRETCHES**

Sit with your right leg extended. Rest the sole of your left foot against your right inner thigh. Stretch 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 toward 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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T: 1-888-707-1880 | 5955 Don Murie St., Niagara Falls, Ontario L2G 0A9 | sales@dyaco.ca

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