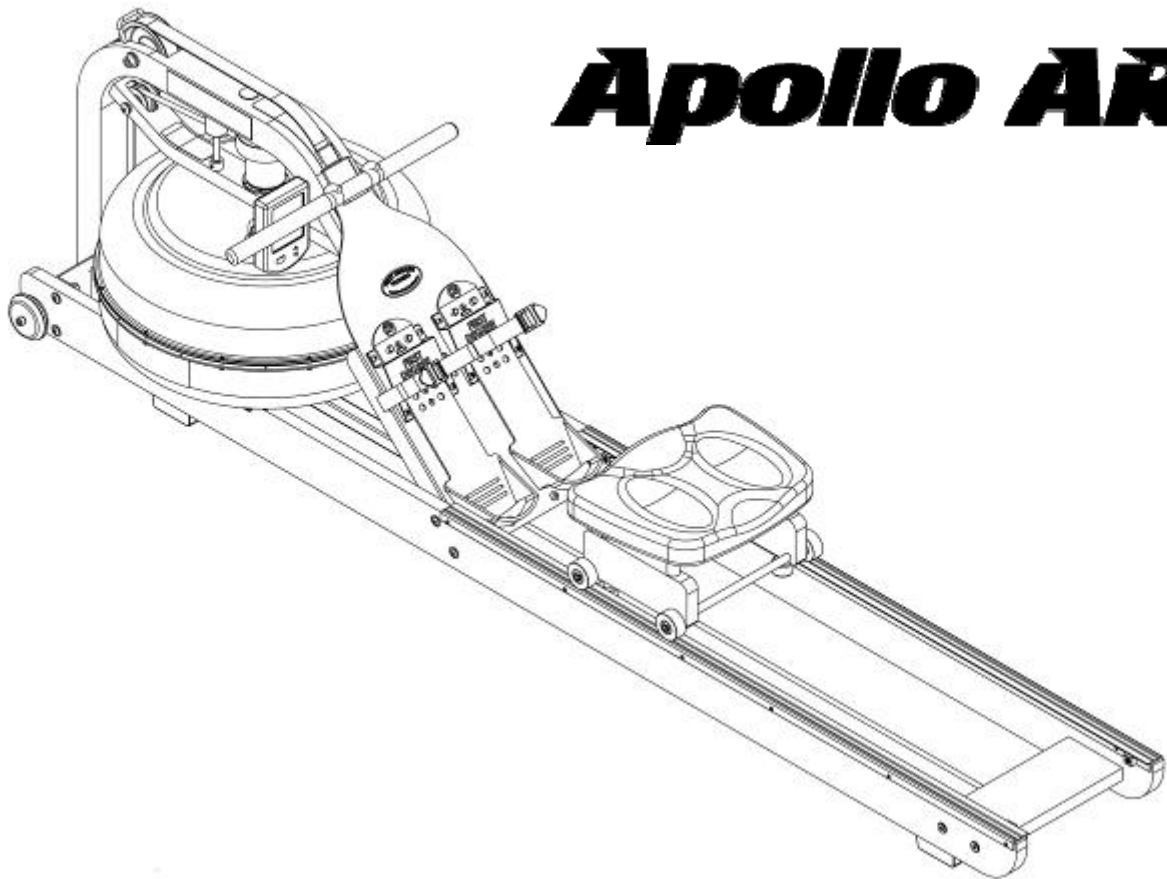


# Owners Manual



***Apollo AR***

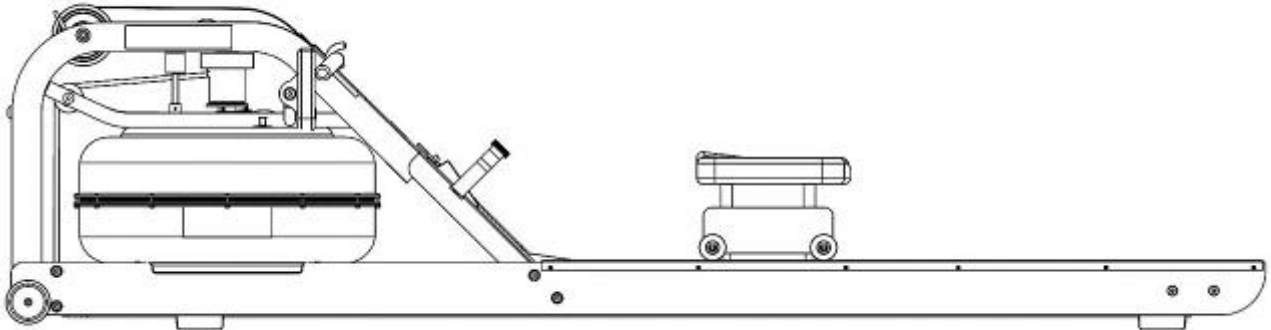
**Featuring Patented Adjustable  
Fluid Resistance Technology**



**FIRST DEGREE FITNESS**  
FLUID INNOVATION

[www.firstdegreefitness.com](http://www.firstdegreefitness.com)

# Apollo Hybrid **AR**



Congratulations on your purchase of the Apollo Hybrid AR Rower. First Degree Fitness is proud to present the Apollo Hybrid AR Rower as part of our exclusive range of commercial and home use products featuring patented Adjustable Fluid Resistance.

Our unique combination of precision steel and solid wood frames incorporate only the highest quality American Ash which is collected using the latest technology in sustainable harvesting from renewable plantations.

Note that slight variations of colour in the wooden side rails, seat and cross-member are normal and part of Mother nature's artistry. The wood grain patterns and subtle hues of each Apollo Hybrid AR Rower makes every unit highly individual and designed to compliment any environment.

Follow all instructions carefully for correct assembly, tank filling, water treatment, service and safety.

Access to our world-wide distributor and service network is available at [www.firstdegreefitness.com](http://www.firstdegreefitness.com)

Check contents of Box 1 and Box 2 to assure all parts are present and correct prior to assembly.

# Training with the Apollo Hybrid AR Rower

1. As with any piece of fitness equipment, consult a physician before beginning your Apollo Hybrid AR Rower exercise program.
2. Follow instructions provided in this manual for correct foot position and basic rowing techniques.



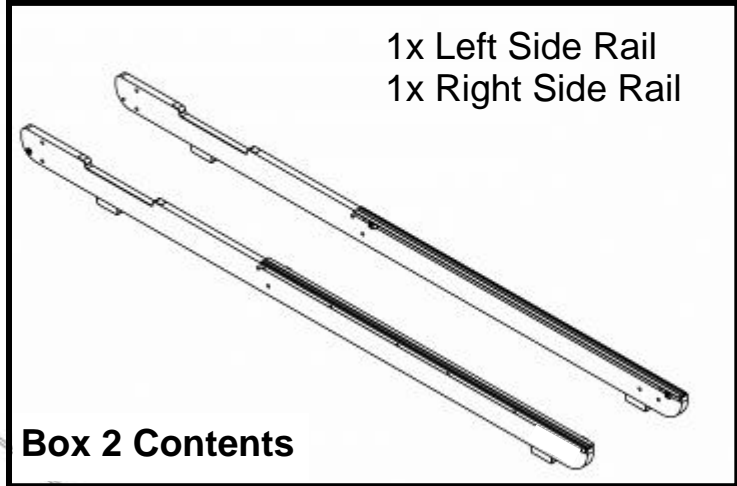
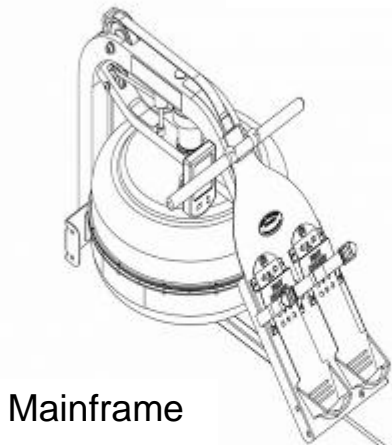
1. The Apollo Hybrid AR Rower can stand vertically for storage. Make sure a secure location is chosen, such as the corner of a room or against a wall on an even, secure surface.
2. Keep hands and fingers away from moving parts, as indicated in this manual.

## Contents

1. Contents of Apollo Hybrid AR Rower Pack.
2. Assembly.
3. Tank Filling and Water Treatment.
4. Operational Instructions.
5. The Apollo Hybrid AR Rower Computer with USB
6. Replacing Rower Belt/Bungee shock cord.
7. Maintenance and Troubleshooting.
8. Parts List/Exploded Diagram
9. Warranty.

# Apollo Hybrid AR Rower Box 1&2 Contents

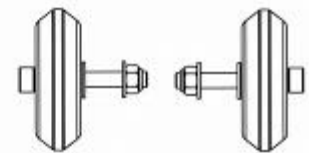
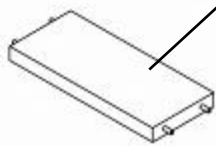
## Box 1 Contents



## Rower Seat

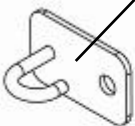


## Rear Brace



Transport Wheel Assembly

## Bungee hook mount



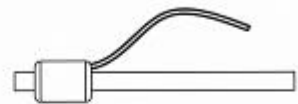
## 1x 13mm Spanner



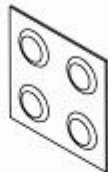
## 2x AA Duracell Battery



## Siphon



## 4x Water Treatment Tablet



16x M8 Washer



M8 Standard Nut



8x M8 Nylock Nut



4x M6x15mm bolt



8x M8x45mm bolt



Owners Manual (1x)



1x 5mm Allen Key

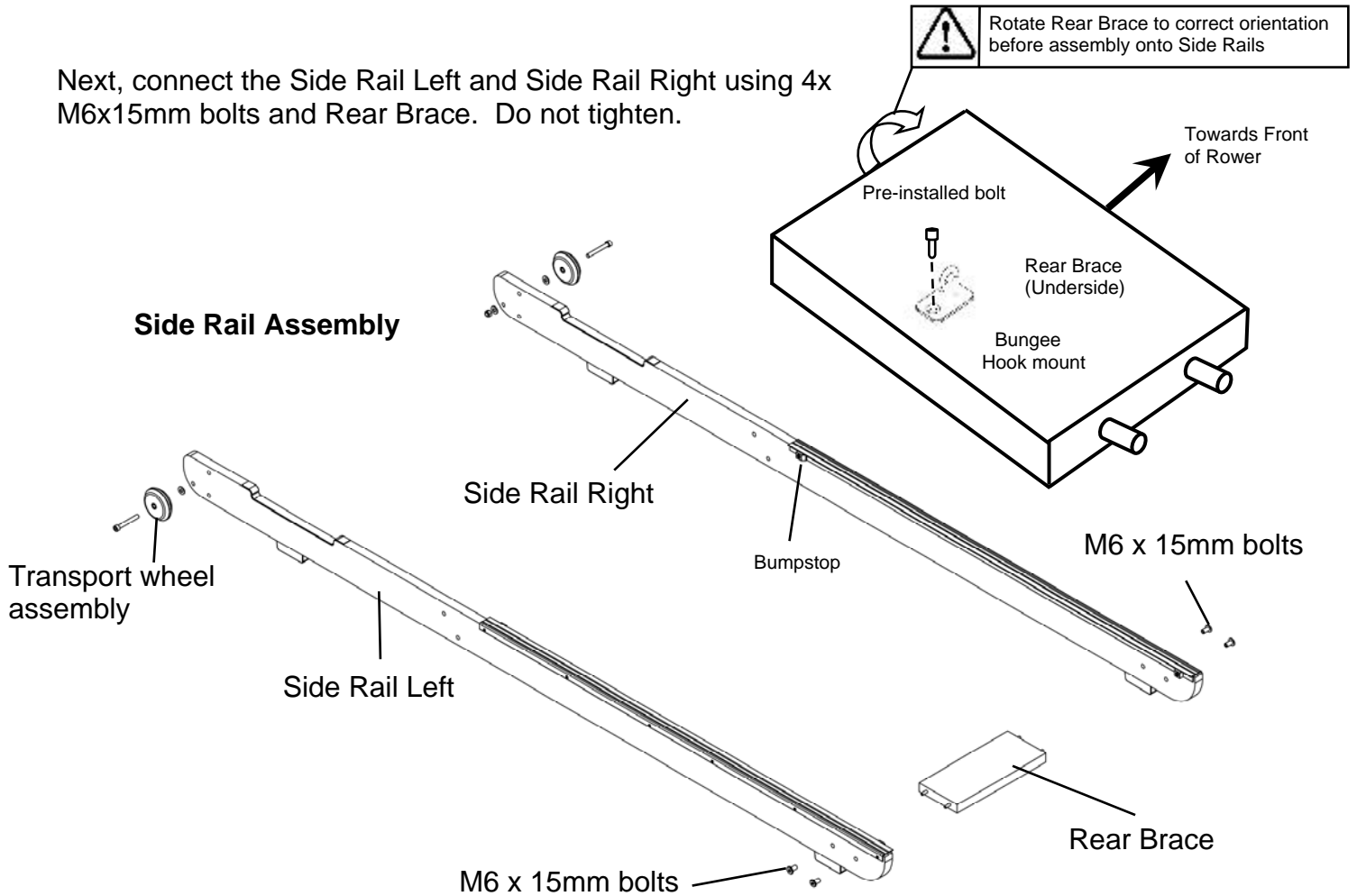


1x 6mm Allen Key

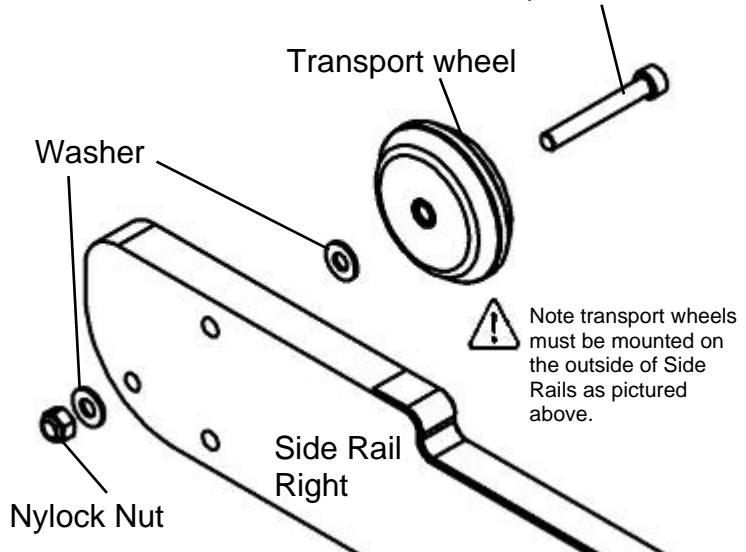
## Side Rail/Rear Brace/Transport Wheel assembly:

Start with the Rear Brace and on the underside you will find a pre-installed bolt. From the hardware kit, take the Bungee hook mount and install it onto the Rear Brace as shown. Note the orientation of the Brace and hook must be correct in order to hold the end of the bungee shock cord as depicted by the arrow in the illustration, which points toward the front of rower.

Next, connect the Side Rail Left and Side Rail Right using 4x M6x15mm bolts and Rear Brace. Do not tighten.



### Transport wheel assembly



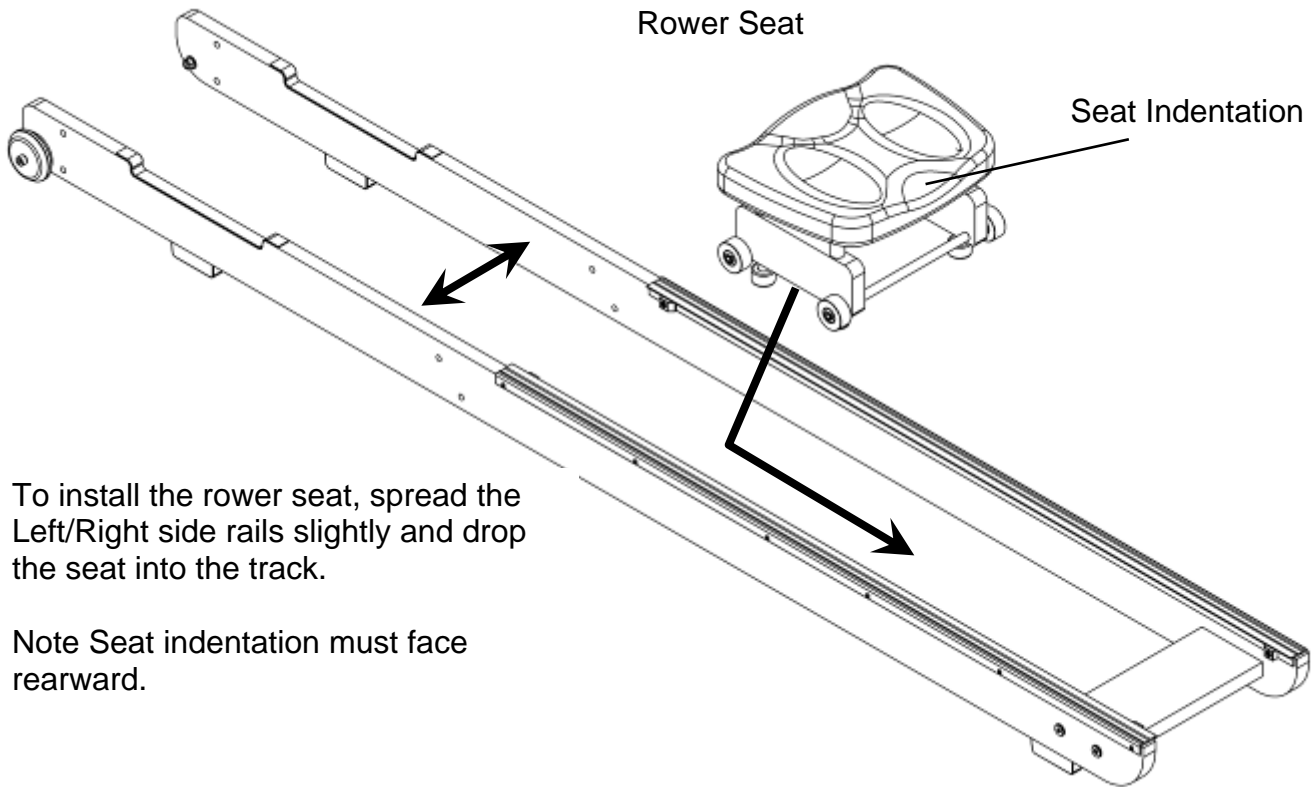
Once the Rear Brace and Side Rails are assembled, mount the Transport wheel assembly onto the Left/Right Side Rails.

Note: One washer on outside and one washer on the inside of the side rail.

Do not over tighten the Transport wheel axle as it may inhibit Transport wheel rotation.

Tip: Bumpstops facing inside of rail for correct assembly orientation.

# Mounting Rower Seat and Upper mainframe:



To install the rower seat, spread the Left/Right side rails slightly and drop the seat into the track.

Note Seat indentation must face rearward.

Next, install the Main upper frame onto the Side rail assembly as shown. You will need 8x M8x45mm bolts, 16x M8 washers, 8x M8 standard nuts and 8x M8 Nylock nuts.

Secure but do not tighten. You may find that the lower bracket bolts can be difficult to access. You can tighten these bolts completely once the rower is standing in the vertical position so for the moment, simply align and loosely thread lower bolts/nuts.

**Bolt Assembly Close up**

M8x45mm bolt

M8 Standard nut

M8 Nylock nut

M8 Washer

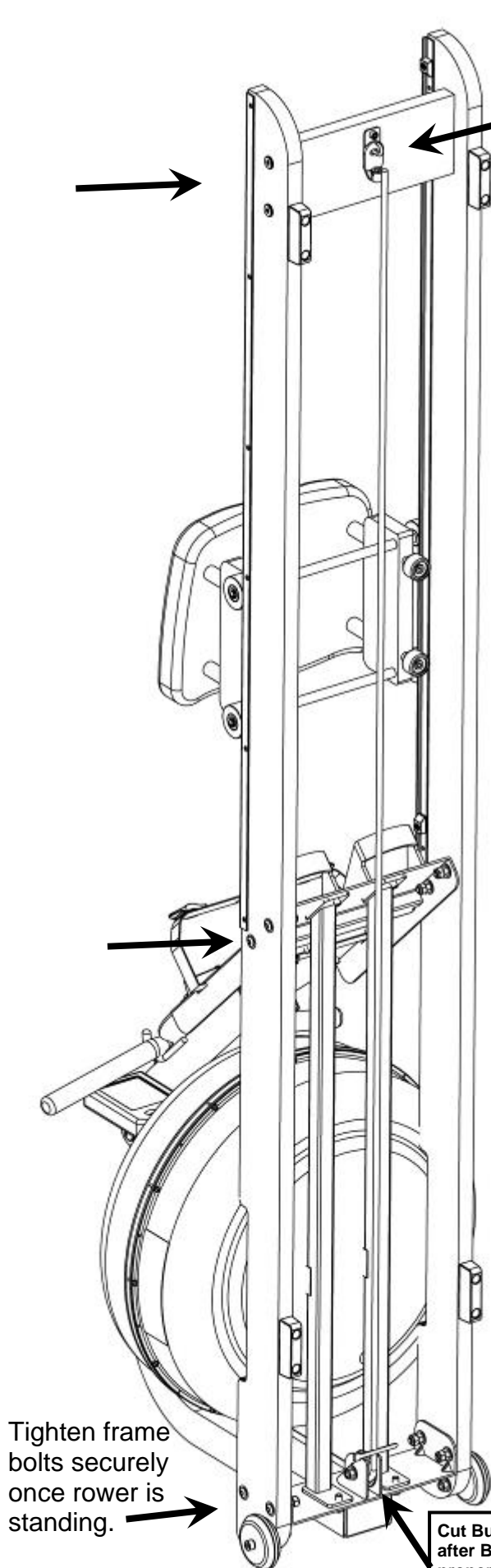
M8 Washer

**Nylock nuts must be outside the standard nut and washer to properly secure assembly**

Nylock

Nylock

# Completing The Apollo Hybrid AR Assembly:



Pull Bungee Cord and hook Bungee end onto the Bungee hook mount as shown.



Do not cut Bungee tie wrap before Bungee cord is attached to rear of rower as shown here.

Once the Bungee cord is attached to the Rear Brace, tighten the bolts holding the Footboard, the Mainframe to Side rail bolts as they are easier to access from the vertical position.

Lower the Apollo Hybrid AR back to the Horizontal position and test for proper bungee recoil.

Check Seat rollers/running boards for dirt or debris before sitting on the rower seat. Small objects captured between the seat rollers and runners can damage the wheels or running surface. Check runners for debris prior to each use and clean regularly.

Note: The Apollo Hybrid AR frame bolts require periodic checking for tightness. Do this at the end of the first month of use and again after every 12 months

Choose a suitable location when standing the product for storage.

The Apollo Hybrid AR frame can be polished with any high grade furniture polish to further highlight the rich luster of the wood finish.

Install supplied 2x AA Duracell batteries and check computer function. Details regarding can be found in the Computer section of this manual.

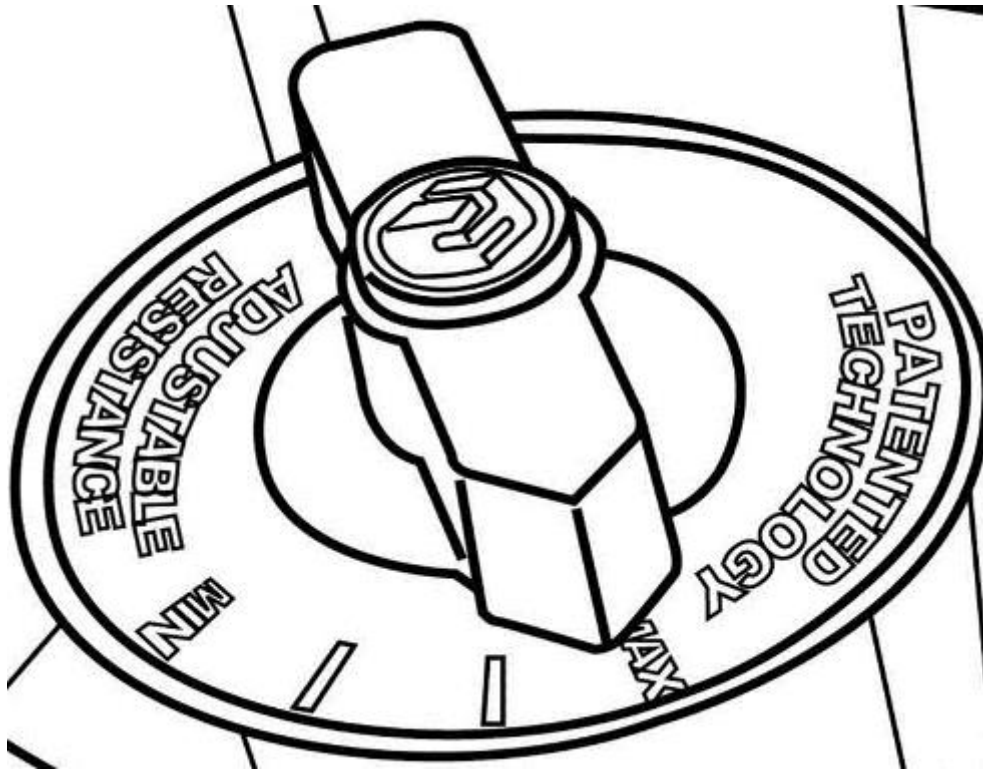
Choose a flat, level surface on which to use your Viking Rower, to avoid rocking and potential premature wear.

Tighten frame bolts securely once rower is standing.

Cut Bungee tie wrap ONLY after Bungee hook is properly connected to Rear Brace.

## Adjustable Resistance (AR) Tank:

The Adjustable Resistance (AR) Tank, developed and patented by First Degree Fitness, offers a true multi-level experience. Water is moved between the "storage" and "active" chambers of the AR Tank. Your new Rowing Ergometer can adapt - at the turn of a dial - to the resistance preferred by each user in the home environment.



MAX: This setting allows the maximum amount of water to reach the Impeller for heaviest resistance

MIN: Keeps a portion of the water in reserve creating light resistance.

## GETTING STARTED

To achieve minimum resistance, select "MIN" on the tank adjuster. **It takes 10 strokes to fill the central (storage) tank, leaving a minimal amount of water in the outer (active) tank. This process is always required if minimum resistance is desired.** Row hard at a steady pace (20 to 25 strokes per minute [SPM] and put some effort into the stroke, ensuring that good form is maintained. You can make adjustments to the resistance level while you row. Your Rowing Ergometer will adapt almost instantly to increases in resistance but will take up to 10 strokes to reduce the effort required, as the central (storage) tank fills up.

## DEVELOPING YOUR ROUTINE

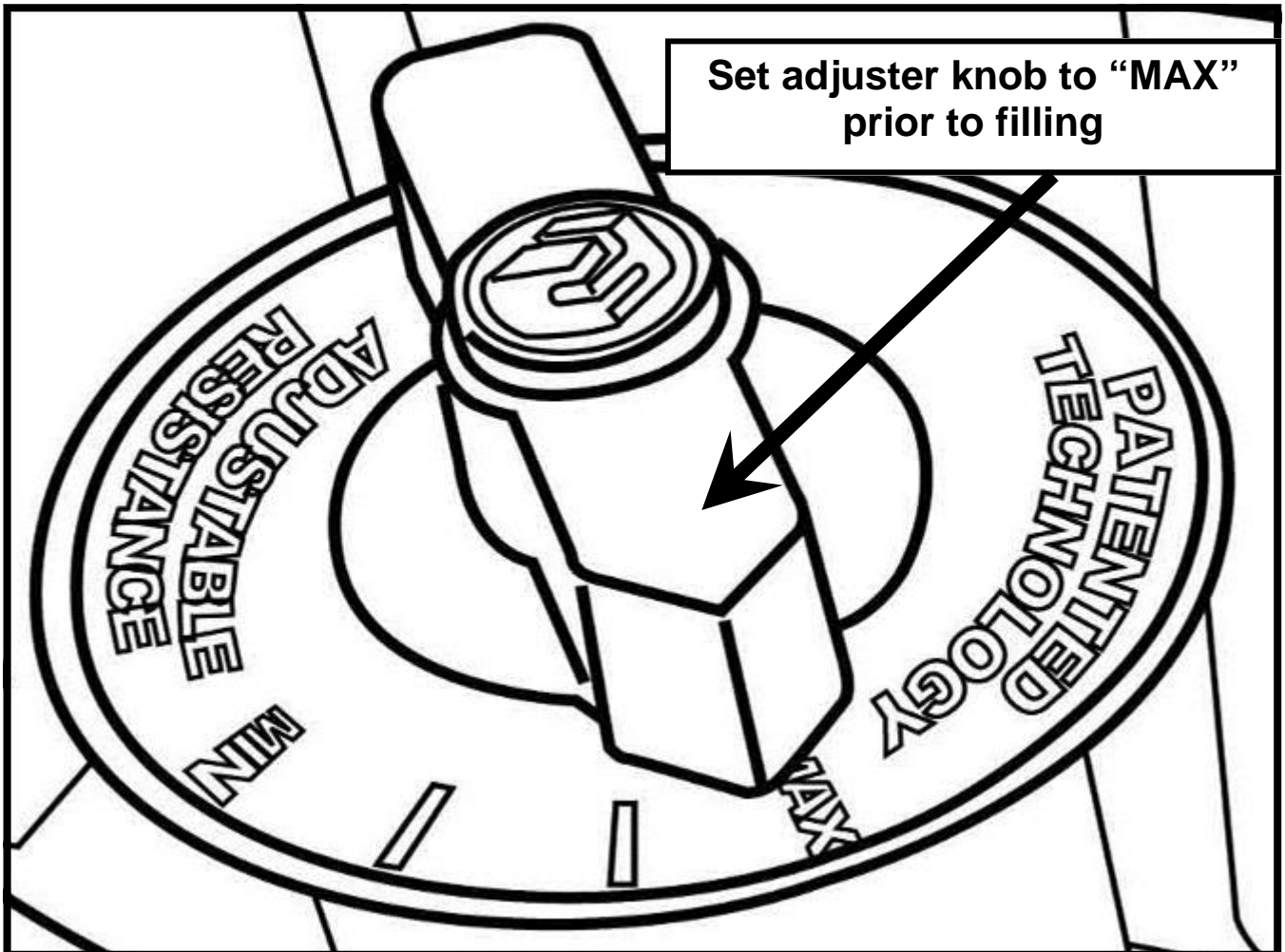
Once you have found a level that gives you the exercise required, changes can be made to SPM and to stroke intensity to further vary your energy input. Interval training is used by most Rowers, where a period of low intensity is combined with short intervals of high intensity. Your FDF Rowing Ergometer allows for changes 'on the fly', to achieve multi-level resistance profiles during a single workout. For more information on exercise routines, please visit our website at [www.firstdegreefitness.com](http://www.firstdegreefitness.com)



## Note on Filling the A/R Tank:



Important: Please Read Before Filling Tank:



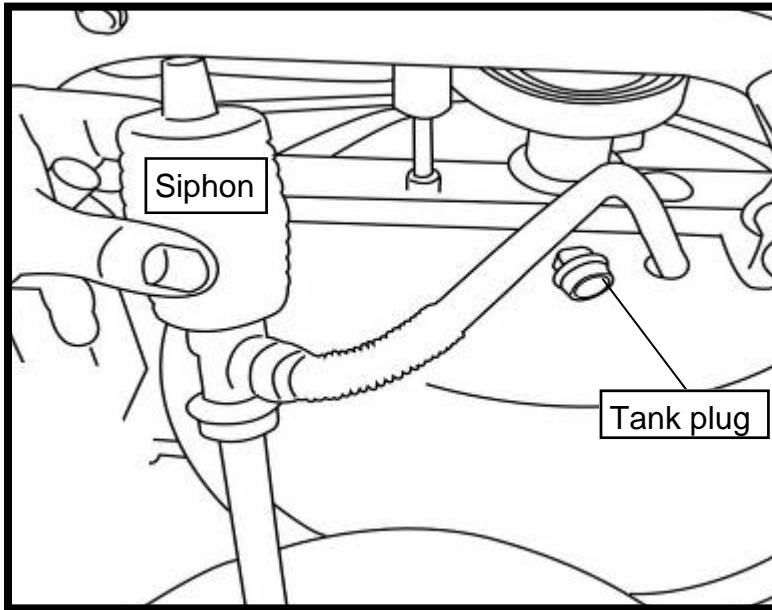
Caution:

When filling the A/R tank, the adjuster handle must be set to the "MAX" position as shown to allow accurate fill levels.

Using any other setting other than "MAX" will result in inaccurate fill levels and in extreme cases could cause leakage to occur during use or when stored in the standing position.

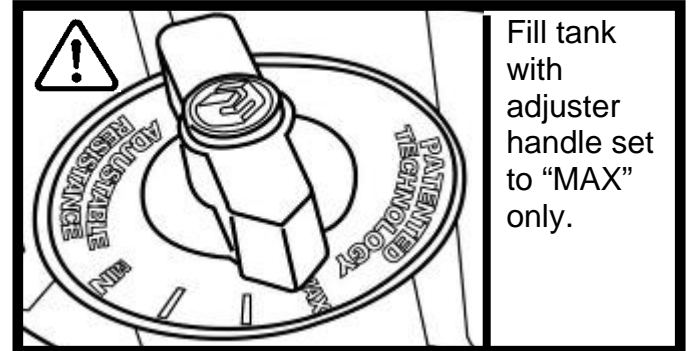
DO NOT overfill the tank beyond the maximum indicated level. Refer to the Tank Level Decal on the lower side of the tank

# Tank Filling and Water Treatment:



Note: 17 liters of water are required for filling.

DO NOT USE ANYTHING OTHER THAN PURE WATER TO FILL YOUR FLUID TANK.



Fill tank with adjuster handle set to "MAX" only.

1. Remove Rubber Fill Plug from the top of the tank.
2. Place a large bucket of water next to the rower and position siphon with the rigid hose in the bucket and the flexible hose into the tank as shown. Note: Make sure small breather valve on the top of the siphon is closed before filling.

**Note: Where water quality is known to be poor, FDF recommends the use of distilled water.**

3. Begin filling tank by squeezing siphon. Use Level Gauge Decal on side of tank to measure volume of water in tank. Important: Do not overfill tank!
4. After filling tank to the desired water level, open the valve on the top of the siphon to allow excess water to escape.
5. Ensure that tank plug is replaced once filling and water treatment procedures are complete.

**Tips on Siphon use:** Putting the fill bucket higher than the tank will allow the siphon to "self-pump" when adding water to the tank.

## Water Treatment Procedures:

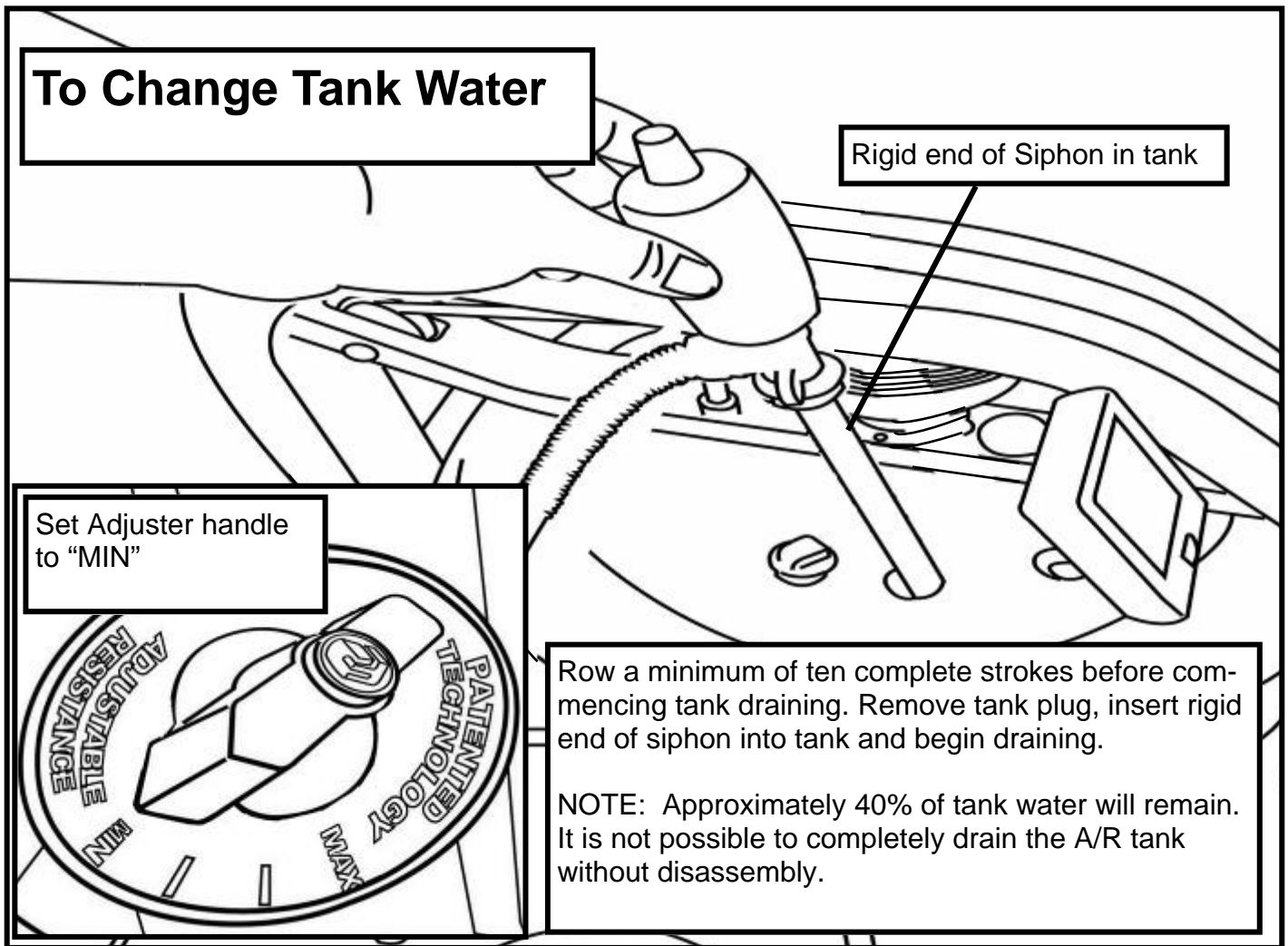
*Add Chlorine tablet.*

- **Note: The amount of water treatment can vary widely depending on the Rower's location and exposure to sunlight. DO NOT, UNDER ANY CIRCUMSTANCES USE OTHER TREATMENT TABLETS OTHER THAN THOSE SUPPLIED WITH YOUR ROWER.** Your rower box contents include 4x water treatment tablets, which is sufficient for several years of water treatment. Treat when water becomes discolored or shows signs of Algae/Bacterial growth. **To purchase additional chlorine tabs, please consult your nearest regional dealer/distributor or check our website at [www.firstdegreefitness.com](http://www.firstdegreefitness.com)**



### Caution:

Use a drop cloth under the tank when filling or emptying the tank to avoid staining floor or carpet



## Removing/Changing Tank Water:

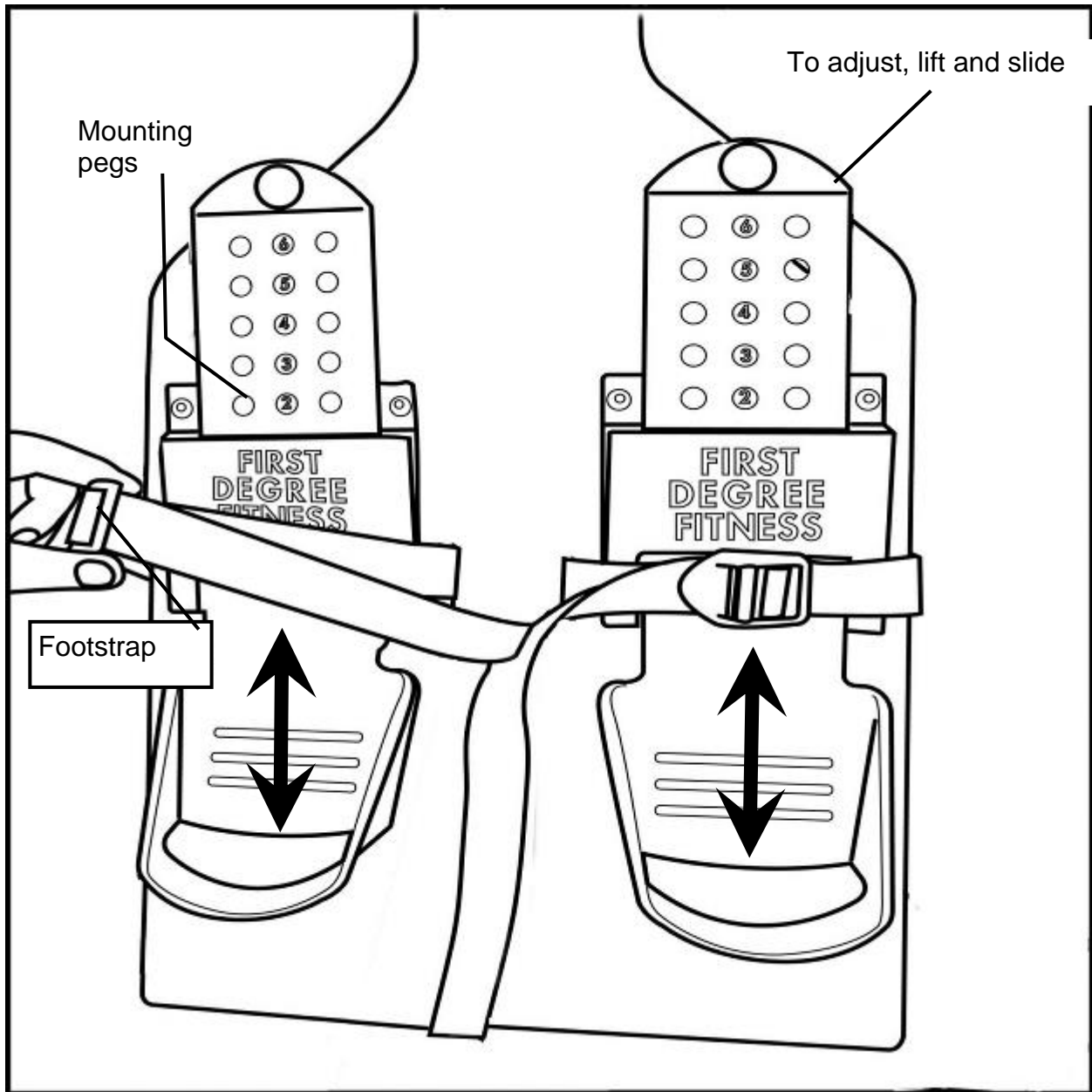
1. Set Adjuster handle to "MIN"
2. Row at least ten strokes to fill the storage reservoir as completely as possible.
3. Remove Tank Plug.
4. Insert rigid end of siphon into the tank, and flexible hose into a large bucket.
5. Drain tank (approx. 40% of water will remain) and then refill following directions for Tank filling as described in the Tank Filling section of this manual.

**Note:** The valve on top of the siphon must be closed to allow proper drainage.

**Note:** Water treatment will preclude the need to change tank water if the treatment schedule is maintained. Additional chlorine is required only when discoloration appears in the water.

**Note:** Exposure to sunlight accelerates the breakdown of the Water treatment chemical. Moving the rower away from direct sunlight will extend the period between water treatments.

## Slider Footplate



The Slider Footplate is designed to fit a wide range of foot sizes, and is very simple to use.

To adjust, lift the top of the sliding portion of the footplate and slide up or down. The numbers 1-6 represent a guideline from which the proper length can be determined. Secure the plate onto the mounting pegs and push down firmly to lock into position.

Tighten the Footstraps securely and begin your workout.



**WARNING:** Never operate this rower without feet properly secured in Footstraps, or without the sliding portion of the Slider Footplate locked into position!

## How to Row?

1. Begin the stroke comfortably forward and push strongly back with your legs while keeping your arms and back straight.
2. Begin to pull your arms back as they pass over your knees and continue the stroke through to completion rocking slightly back over your pelvis.
3. Return to the starting position and repeat.

## How Often?

Begin with 5 minute training sessions once a day and aim for around 2:30 to 2:45 for 500m time. Row at a pace that keeps the water circulating continuously between strokes.

Progress a few minutes more each day until you are comfortable with 30-45 minutes training time 3 or 4 times a week.



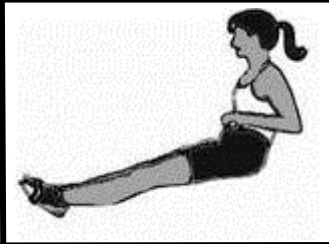


This will provide aerobic endurance benefits, muscle toning and sufficient calorie burning to form part of a weight loss program.



## CAUTION

Always consult a doctor before beginning an exercise program.

Stop immediately if you feel faint or dizzy.

				
<b>Catch</b> Comfortably forward with straight back and arms.	<b>Drive</b> Push with the legs while arms remain straight.	<b>Finish</b> Pull through with arms and legs rocking slightly back on your pelvis.	<b>Recovery</b> Upper body tips forward over your pelvis and move forward.	<b>Catch</b> Catch and begin again.

# The Apollo Hybrid AR Rower Computer:



## Options:

Auto Start: Commence rowing to activate.

Hold button down for 3 second first to RESET.

Add 1000m distance each button push to accumulate required distance then begin rowing to initiate count-back.

**Auto-Pause:** A temporary halt in exercise will result in the following:

**For over 5 seconds and under 5 minutes:**

SPM/500METER/WATT to zero. Distance/TIME values are saved. CAL per hour defaults to Total CAL.

A Resumption in exercise in less than 5 minutes will resume Distance/TIME/ from saved values automatically.

**Auto Power Down:** Over 5 minutes. All values revert to zero after restart.

## Computer Instructions:

**TIME:** Auto start elapsed time.

**500M TIME:** Time to row 500 meters, updated at the completion of each stroke.

**PULSE:** Requires optional receiver and chest strap (sold separately).

**SPM:** Strokes per minute updated each stroke.

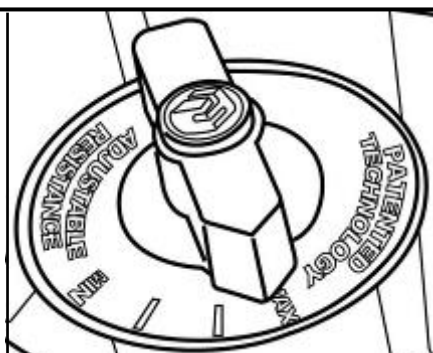
**CAL HOUR:** Updated each stroke.

**WATT:** Unit of power updated per rowing stroke.

**LEVEL UP/DOWN:** Use the LEVEL UP/ DOWN buttons in conjunction with the Fluid Tank Resistance Adjuster handle for accurate 500M/Distance/CAL/WATTS.



**MAX:** 5  
—  
—  
**MIN:** 1



# Using the First Degree Fitness USB Interface

## Description:

The USB connectivity now built in to all new models of FDF Console and IPM allow you to enhance your exercise experience by connecting to your home PC or Laptop. Using FDF's own sample applications you can exercise while enjoying your favorite movies. *NetAthlon 2 XF for Rowers* lets you race with other Internet connected rowers in a Virtual Reality 3D environment or train solo.

## Setting up USB connectivity

1. Download and Install the USB Device Driver (CDM2xxxx\_Setup.exe for 32 and 64 bit Windows 7/Vista/XP) from the FDF Website.
2. Download and Install the Sample USB Applications from the FDF Website ([www.firstdegreefitness.com](http://www.firstdegreefitness.com)).  
Download and Install NetAthlon 2 XF for Rowers from <http://www.webracing.org/downloads.htm>

## Connecting your console

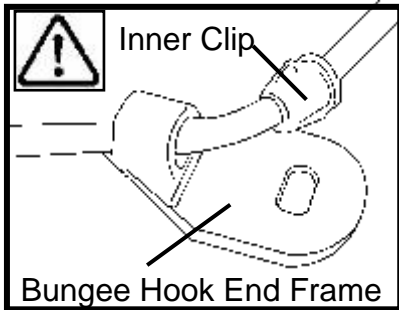
- The USB Connector is located on a flying lead at the rear of the IPM, along with the Sensor and Heart Rate Monitor Connectors.
- Connect to a Laptop or PC using a standard USB cable, you may need to wait while Windows starts the USB Device Driver.

**Note:** Please refer to computer manual where applicable or for further information refer to our website at [www.firstdegreefitness.com](http://www.firstdegreefitness.com)

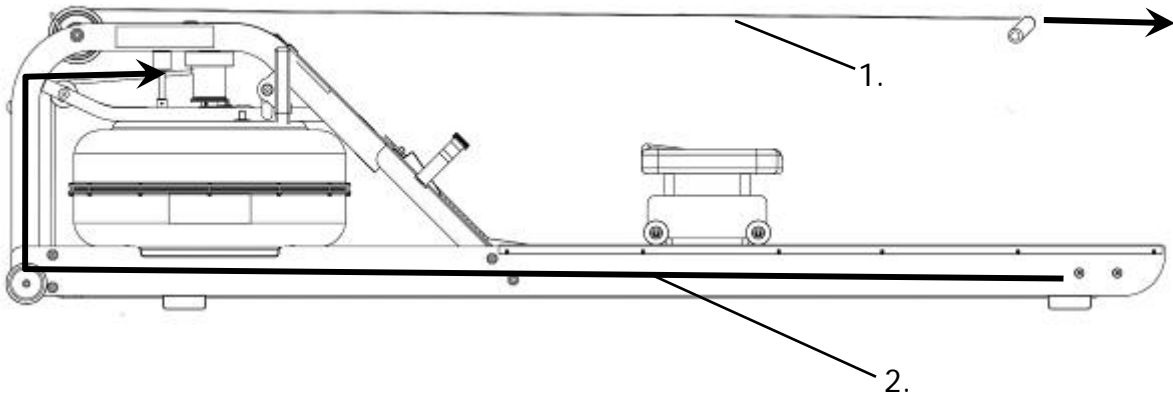
## Detaching the Rower Belt:

1. To detach belt, simply pull beyond the range of the normal rowing stroke until the belt detaches from the belt bungee pulley.

**Tip:** You'll hear the Velcro separating just before the belt detaches.

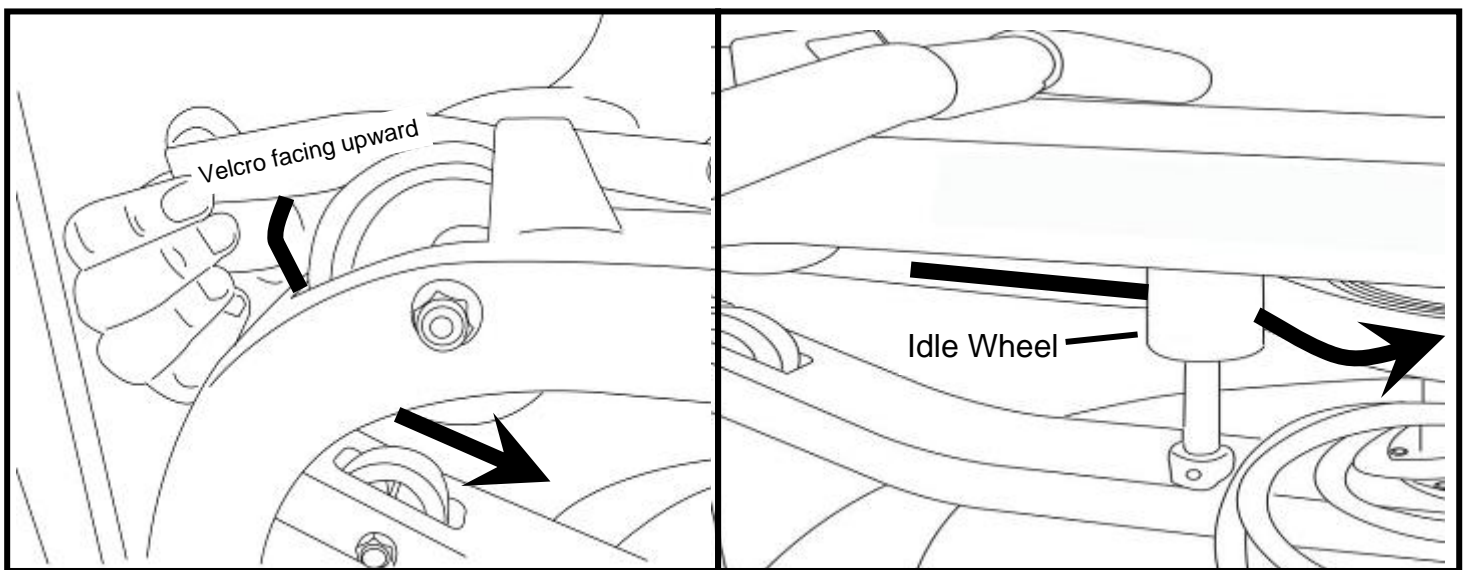


2. Unhook the Bungee Shock Cord from the Rear Leg. Then, push out the Inner Clip from the Bungee Hook End Frame. Pull the Bungee through the Inner Clip until free. This will allow for the Bungee Shock Cord to be threaded completely out of the Main Frame and up to the Belt Bungee Pulley where it will be re-attached once the Rower Belt is in the proper position.



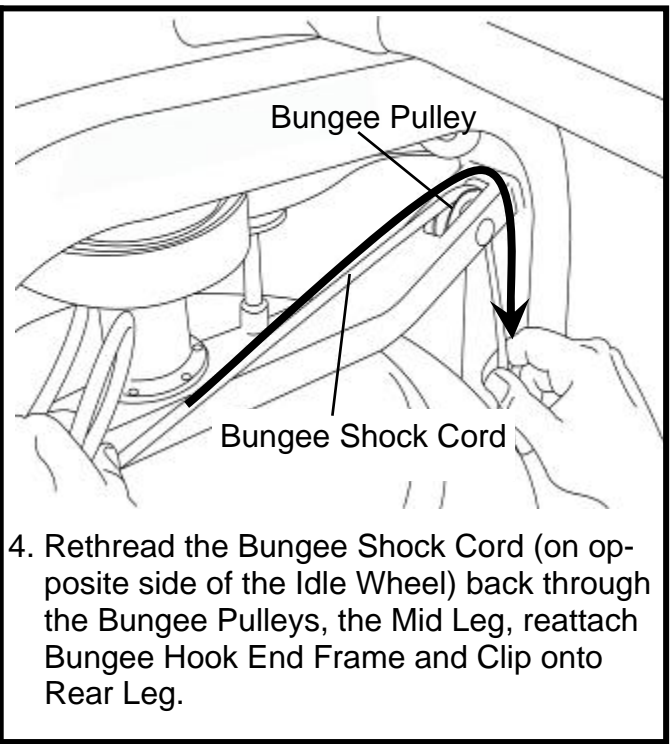
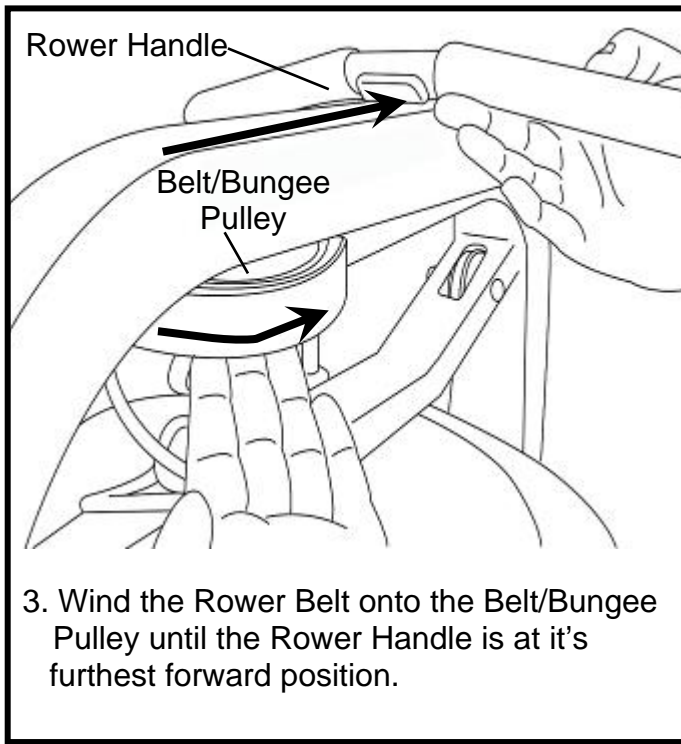
## Reattaching the Rower Belt:

1. Begin reattaching the Rower Belt by threading around the Rower Belt Pulley with the Velcro side facing upward as illustrated.

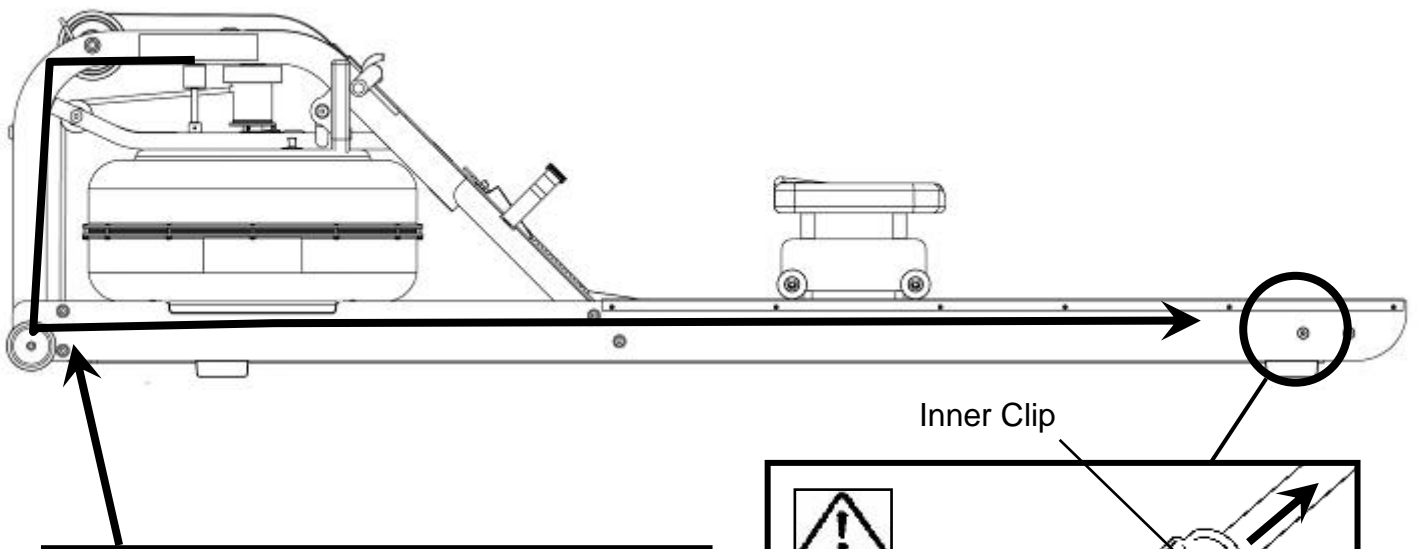


2. Next, thread the Belt around the Idle Wheel as shown. Once around the Idle Wheel, attach the Rower Belt to the Belt/Bungee Pulley. There is an obvious "lip" at the attachment point.

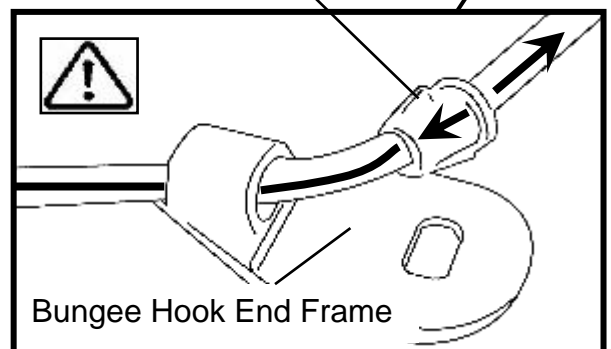




Recoil tension can be simply adjusted to suit each user. To adjust, simply push the Inner Clip out of the Bungee Hook End Frame from behind, pull the required amount of bungee through the Inner Clip and replace the Inner Clip into the Bungee Hook End Frame as shown below.



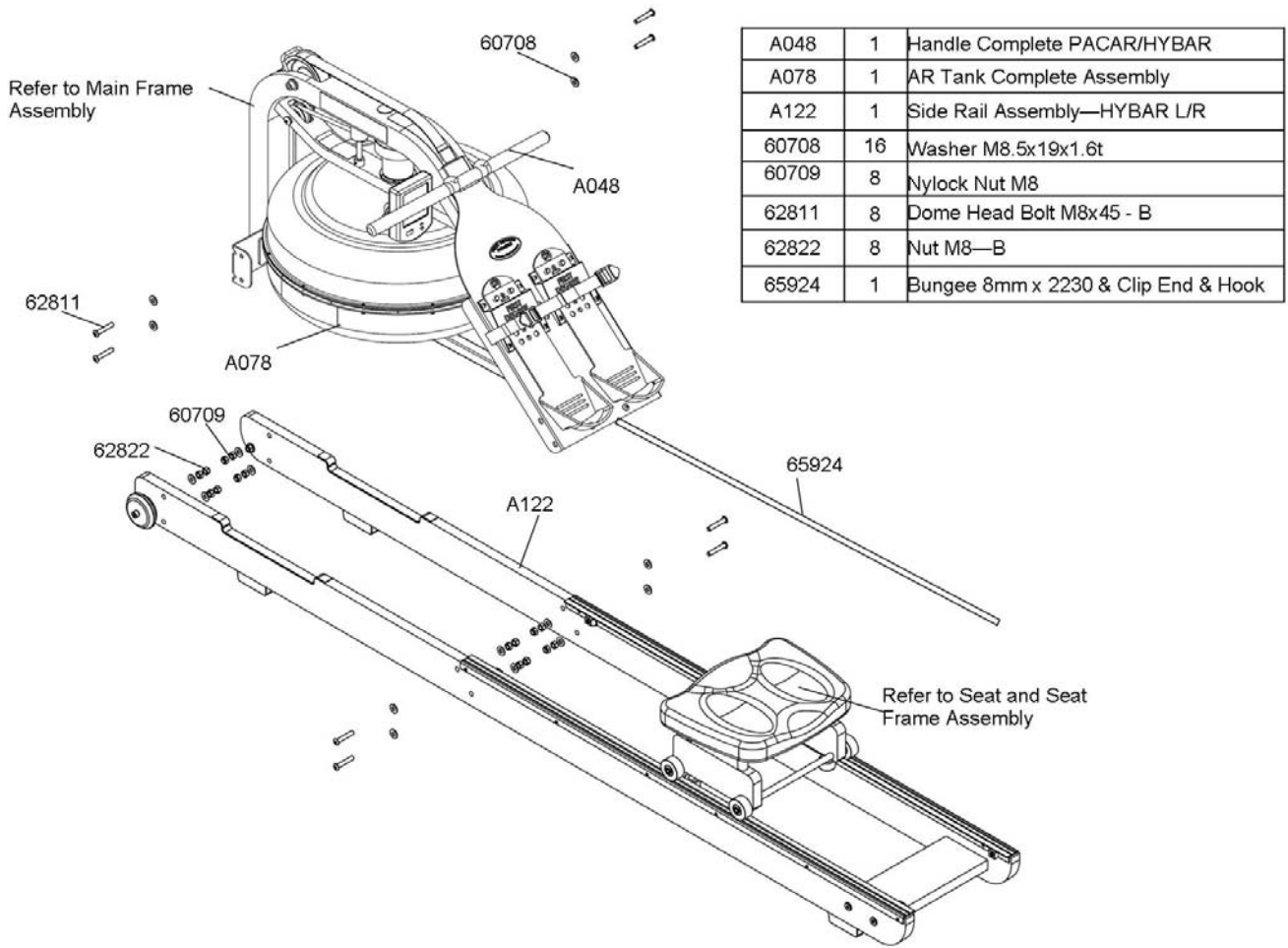
**Hint:** Before reattaching the Inner Clip/ Bungee Hook End Frame, tie a slip knot under slight tension at the lower bungee pulley. This will keep the bungee under tension while reassembling the Bungee Hook End Frame.



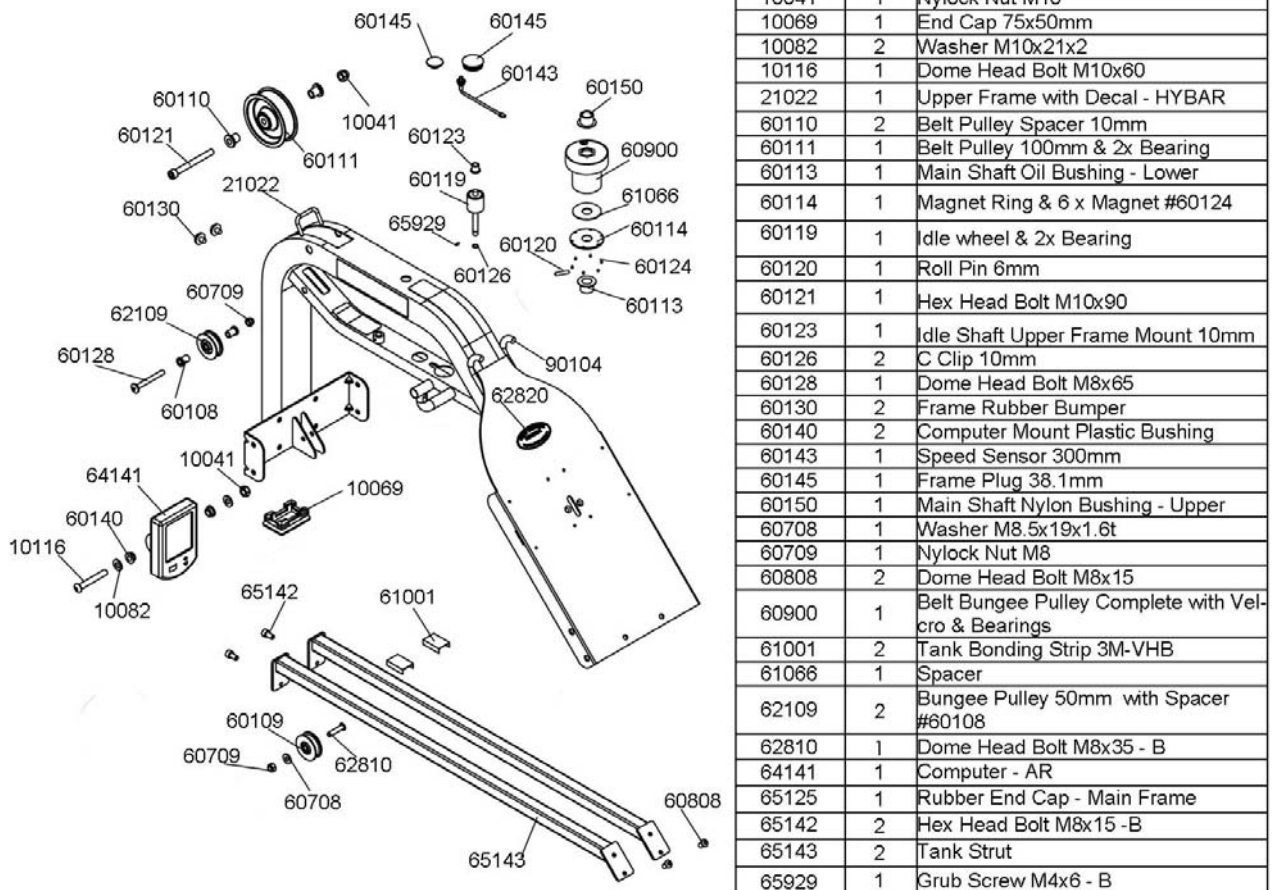
## Troubleshooting:

Fault	Probable Cause	Solution
Water changes colour or becomes cloudy.	<p>Rower is in direct sunlight or has not had water treatment.</p> <p>Local tap water is of poor quality.</p>	Change rower location to reduce direct exposure to sunlight. Add water treatment or change tank water as directed in the water treatment section of this manual.
Rower belt slipping off belt/ bungee pulley.	<p>Bungee not under enough tension.</p> <p>Recoil not strong enough</p>	Tighten bungee cord following the instructions in "reattaching the rower belt" section of this manual.
Inconsistent readings on the Apollo Hybrid AR Computer for 500meter split time and SPM (strokes per minute).	<p>Sensor gap</p> <p>Faulty Sensor</p> <p>Sensor has moved out of position</p> <p>Wiring harness</p>	<p>Use the back cover of the computer as a "Gap tool" to check the gap between sensor head and Magnetic ring, or see if the Sensor head has moved out of position.</p> <p>Please contact your nearest FDF customer service center for details</p>
The Apollo Hybrid AR Rower computer does not illuminate after battery installation.	Batteries installed incorrectly or need replacing.	Replace/reinstall batteries in correct position and try again. If the LCD screen fails to illuminate, try rotating the batteries slightly in the computer. If this fails, contact your local service center.
The Apollo Hybrid AR Rower Computer screen illuminates, but does not register when rowing.	<p>Loose or failed connection.</p> <p>Sensor gap too wide</p>	Check that the computer lead is connected properly. If it is connected then contact your local service center. Check Sensor gap

# Exploded Diagram

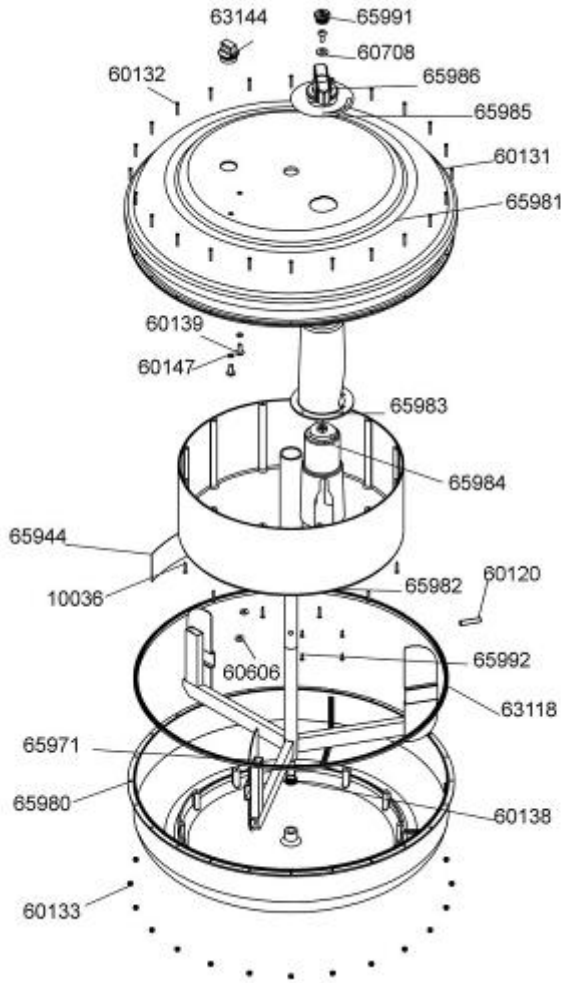


## Main Frame Assembly



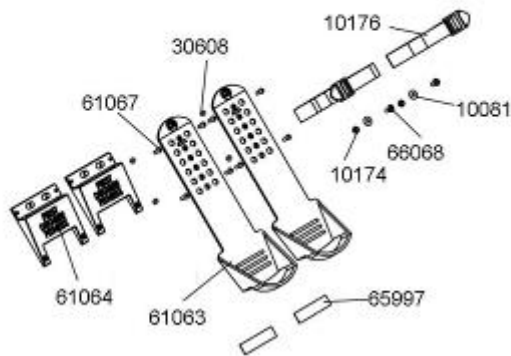
# Parts List

## A078—AR Tank Complete Assembly



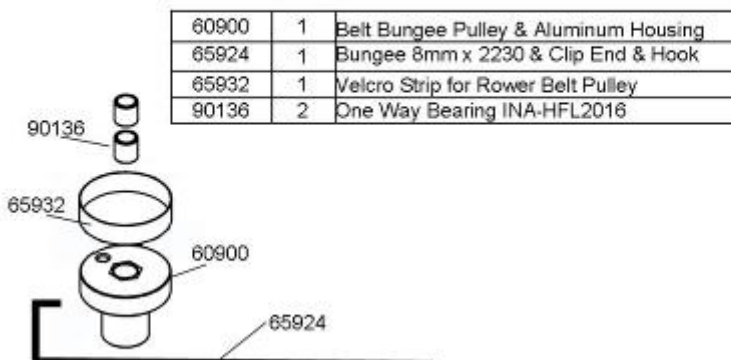
10036	12	Counter Sunk Tapping Screw M3x20 SUS
60120	1	Roll Pin 6mm
60131	1	Tank Outer Rubber Protection Ring
60132	24	Round Head Phillips Screw M3x20 SUS
60133	24	Nylock Nut M3 SUS
60138	1	Impeller End Cap
60139	3	Tank Internal Screw M6x15 SUS
60147	2	O Ring 9.5x6.5x1.5
60806	2	Plastic Spacer 15*6*2.5t
60708	1	Washer M8.5x19x1.6t
63118	1	Tank Large Ring Seal - Yellow
63144	1	Tank Plug for HS Tank
65944	1	Decal - HS Tank Level
65971	1	Impeller - AR
65980	1	Lower Tank Shell
65981	1	Upper Tank Shell—Outer
65982	1	Inner Reserve Tank Shell / AR
65983	1	Tank Adjuster Outer Cup
65984	1	Tank Adjuster Inner Cup
65985	1	Decal - AR Resistance
65986	1	Adjuster Knob
65991	1	End Cap-Adjuster Knob
65992	4	Grub Screw M3x12 SUS

## Sliding Footplate Assembly



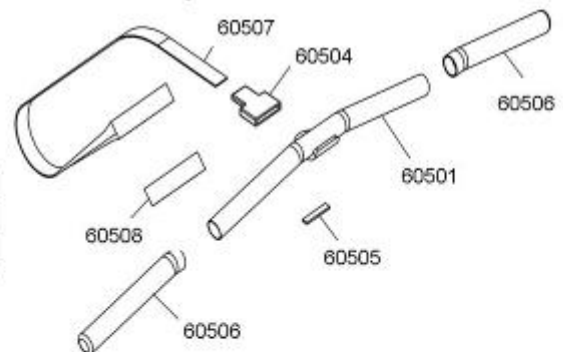
10081	2	Washer M6x16x1
10174	2	Nylock Nut M6
10176	2	Foot Strap & Buckle
30608	8	Nylock Nut M5 -B
61063	2	Footplate Slider
61064	2	Footplate Slider Base
61067	8	Dome Head Bolt M5x15
65997	2	Velcro for Sliding Footplate
66068	2	Counter Sunk Bolt M6X35 -B

## A059 Belt Bungee Pulley Complete



60900	1	Belt Bungee Pulley & Aluminum Housing
65924	1	Bungee 8mm x 2230 & Clip End & Hook
65932	1	Velcro Strip for Rower Belt Pulley
90136	2	One Way Bearing INA-HFL2016

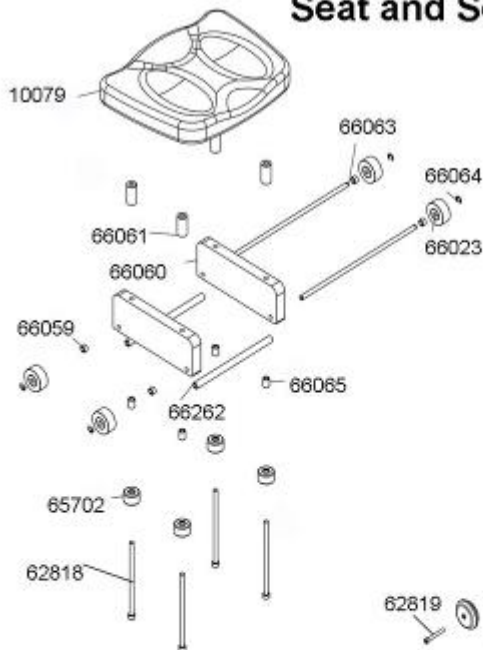
## A048 Handle Complete—PACAR/HYBAR



60501	1	Rower Handle with Belt
60504	1	Handle/Belt Rubber Cover
60505	1	Inner Rowing Handle Foam
60506	2	Rowing Handle Rubber Grip
60507	1	Rowing Belt & Velcro Strip #60508

# Exploded Diagram

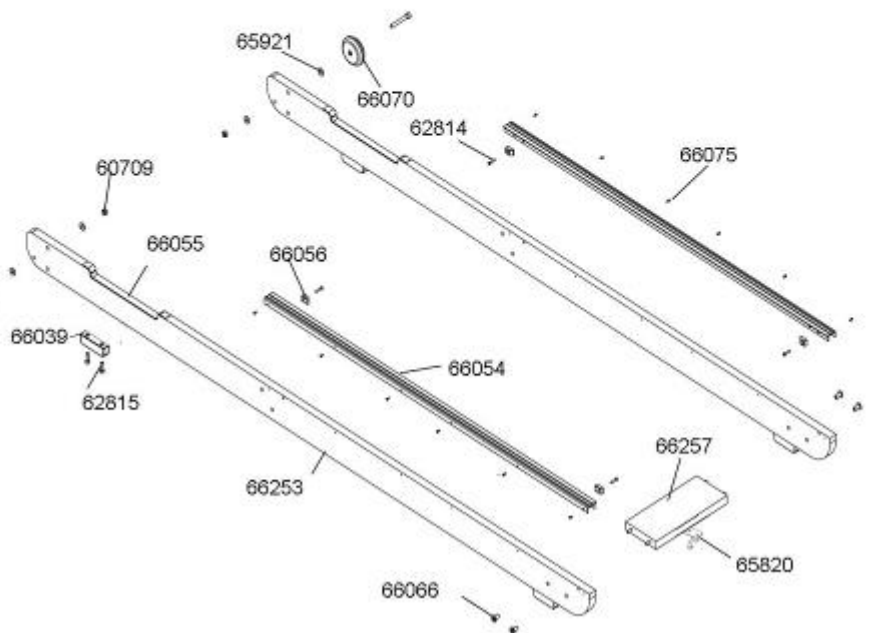
## Seat and Seat Frame Assembly



10079	1	Seat LS-E28
62818	4	Hex Head Bolt M8x160 - B
65702	4	Seat Wheel TRIAR/VX1/HD
66023	4	Seat Wheel Side - V2/HD/HD
66059	4	Spacer 12x8.5 for Seat V2/HD
66260	2	Seat Frame - HYBAR
66061	4	Space 20x40 For Seat V2/HD
66062	2	Spacer 12x209 for Seat V2/HD
66063	2	Axle shaft 8mm V2/HD
66064	4	D7 Eclip
66065	4	Spacer 12x17.5 for Seat V2/HD

## A122 Side Rail Assembly—HYBAR L/R

60709	2	Nylock Nut M8	66055	2	Velcro for Side Rail
62814	4	Hex Head Bolt M4x20 - B	66056	4	Bump Stop - Square V2
62815	8	Hex Head Bolt M6x20 - B	66066	4	Bolt M6x17
62819	2	Hex Head Bolt M8x60 - B	66070	2	Transport Wheel - V2/HD
65820	1	Bungee Hook Bracket Complete	66075	12	Screw M3x10 for Wood
65921	4	Washer 8.5x19x1.6t - B	66253	2	Side Rail - HYBAR
66039	4	Side Rail Bumper V2	66257	1	Rear Board HYBAR
66054	2	Nylon Rail Runner-V2			



# Apollo Hybrid AR Rower

## **INTERNATIONAL WARRANTY – HOME USE**

First Degree Fitness Limited warrants that the **Apollo Hybrid AR (model HYBAR)**, purchased from an authorised agent and in its undamaged original packaging, is free from defects in materials and workmanship. First Degree Fitness Limited or its agent will, at their discretion, repair or replace parts that become defective within the warranty period, subject to the specific inclusions and exclusions below.

### **Metal/Wood Frame – 5 Year Limited Warranty**

First Degree Fitness will repair or replace the metal Main Frame of the Rower should it fail due to any defect in materials or workmanship within 5 years of the original purchase. Warranty does not apply to frame coating.

### **Polycarbonate Tank & Seals – 3 Year Limited Warranty**

First Degree Fitness will repair or replace the polycarbonate tank or seals should they fail due to any defect in materials or workmanship within 3 years of the original purchase.

### **Mechanical Components (of a non-wearing nature) – 2 Year Limited Warranty**

First Degree Fitness will repair or replace any mechanical component should it fail due to any defect in materials or workmanship within 2 years of the original purchase.

### **Specific Inclusions**

- Nylon Seat Runners
- Stainless Steel Impeller Assembly

### **All Other Components (of a wearing nature) – 1 Year Limited Warranty**

First Degree Fitness will repair or replace any component should it fail due to any defect in materials or workmanship within 1 year of the original purchase.

### **Specific Inclusions**

- Bungee recoil cord
- Hand grips & foot straps
- Polyester rowing belt
- Seat
- All pulleys, rollers & bearings
- All rubber components
- Computer & speed sensor (excluding replaceable batteries)
- Footplates (pivoting & sliding)

### **General Exclusions**

- Damage to the finish of any part of the machine
- Damage due to neglect, abuse, incorrect assembly or use of the machine
- Any charges for freight or customs clearance associated with the return or dispatch of parts
- Any damage to or loss of goods during transport of any kind
- Any labour cost associated with a warranty claim

### **General Conditions**

- The serial number of the machine must be correctly registered with First Degree Fitness Limited or one of its appointed distributors
- First Degree Fitness Limited reserve the right to examine any part where replacement is claimed under warranty
- Warranty period applies only to the original purchaser from the date of purchase and is not transferable
- The product must be returned to your place of purchase in original packaging with transportation, insurance and associated charges paid for by you and risk of loss or damage assumed by you
- First Degree Fitness makes no other warranties except as stated here and expressly disclaims all warranties not stated in this warranty. Neither First Degree Fitness nor its associates shall be responsible for incidental or consequential damages
- Manufacturer's warranty automatically commences upon sale of the product to end user or upon the expiration of one (1) year from month of manufacture, whichever occurs first