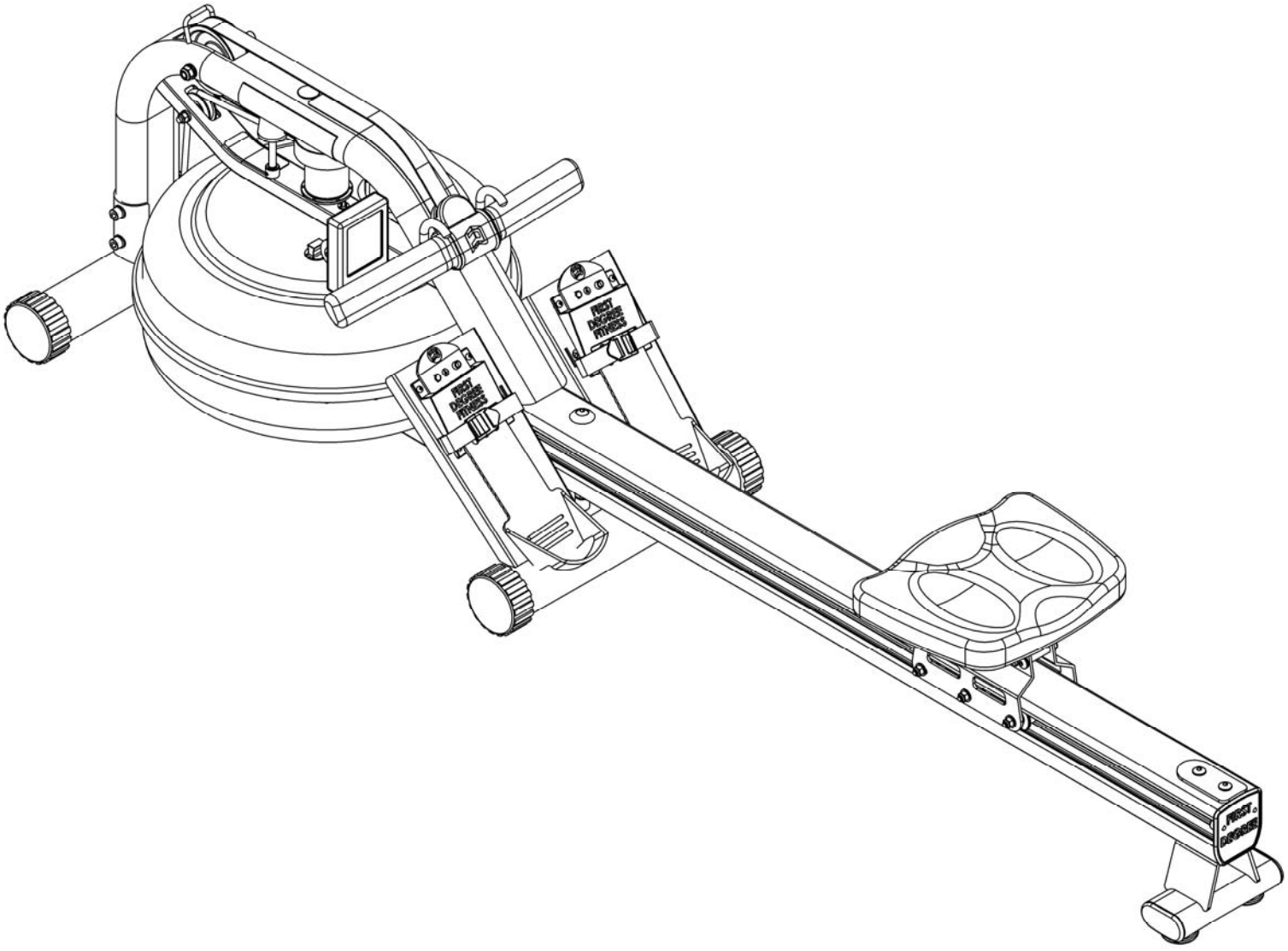
Owners Manual



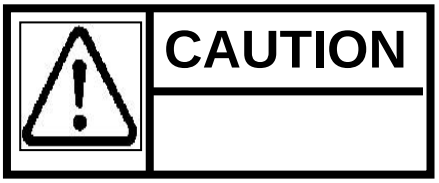
TRIDENT Challenge AR

FIRST DEGREE FITNESS
FLUID INNOVATION
www.firstdegreefitness.com

Contents

Training with the Trident Challenge AR

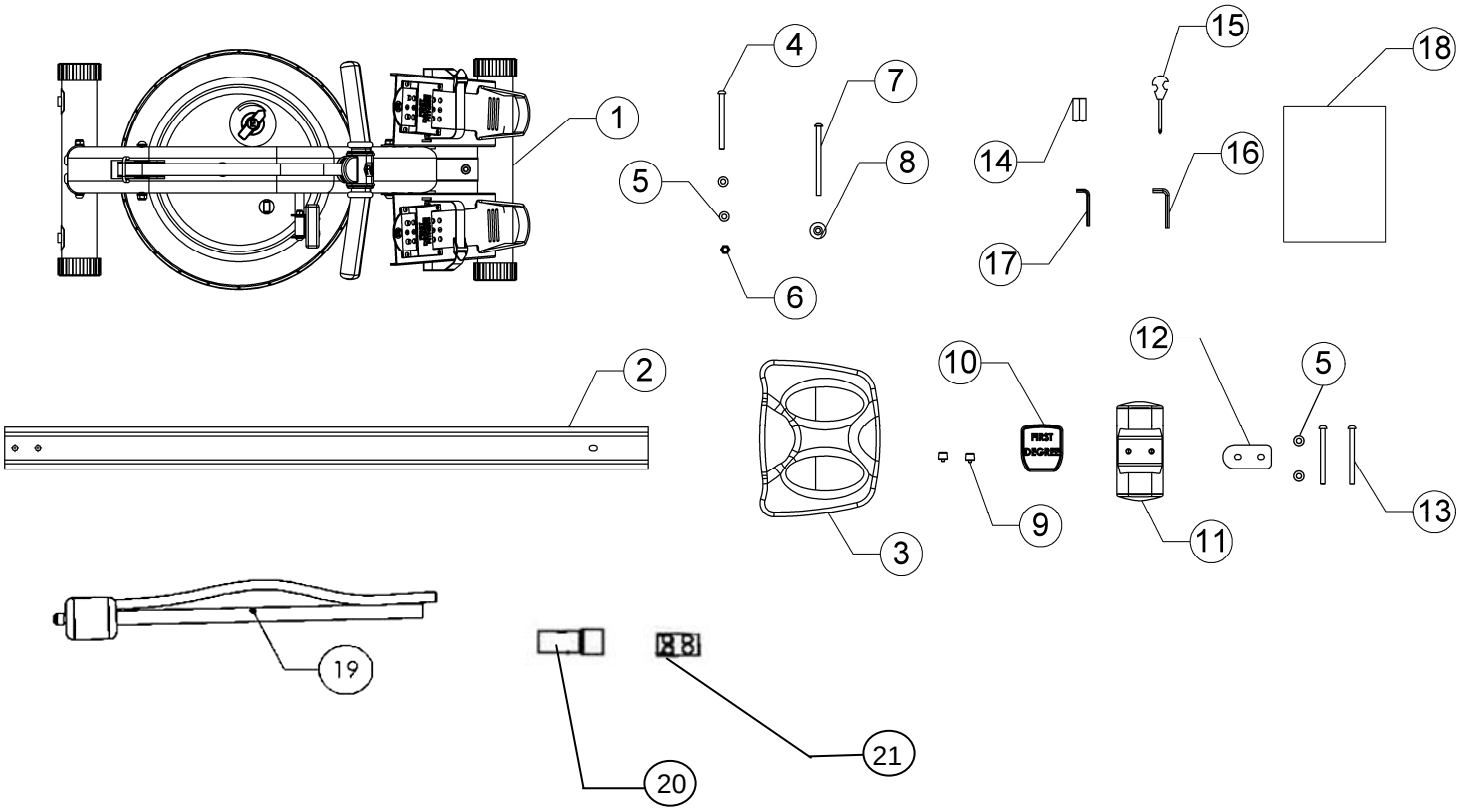
1. As with any piece of fitness equipment, consult a physician before beginning your Trident Challenge AR Exercise Program.
2. Follow instructions provided in this manual for correct foot position and basic rowing techniques.
3. For detailed rowing techniques refer to our international website at www.firstdegreefitness.com



1. The Trident Challenge AR can stand vertically for storage. Make sure a secure location is chosen, such as in the corner of a room.

2. Keep hands and fingers away from moving parts, as indicated by the warning sticker on the mainframe of your machine.

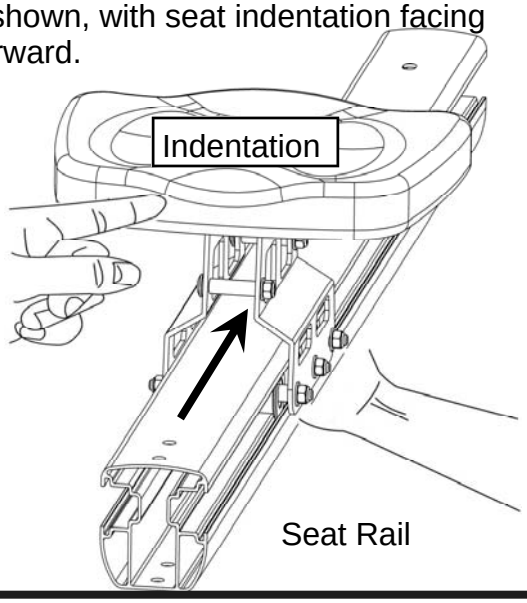
Trident Challenge AR Box Contents

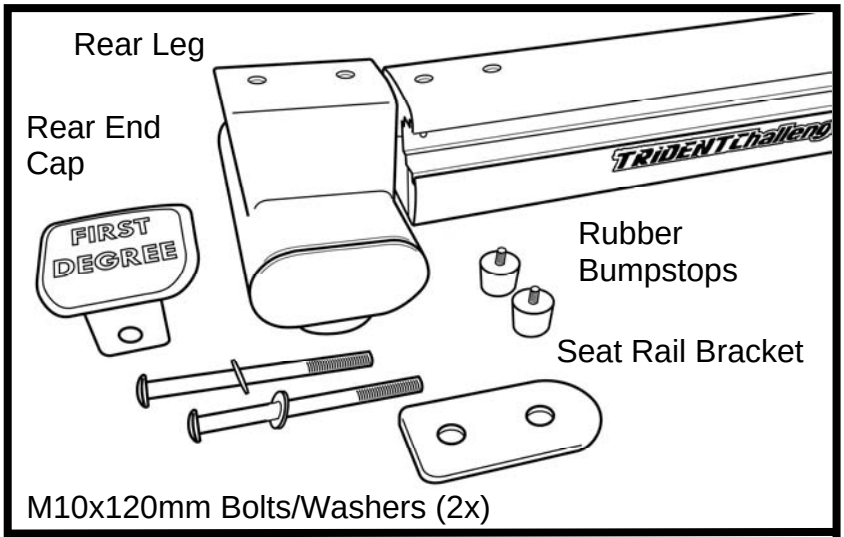


Item	Description	Item	Description
1	Main Frame	11	Rear Leg
2	Seat Rail (boxed separately)	12	Seat Rail Bracket
3	Rower Seat	13	M10x120mm Rear Leg Bolts (Dome)
4	M10x120mm Horizontal Seat Rail bolt	14	AA batteries (x2)
5	M10 Washer	15	Multi-tool
6	M10 Nylock Nut	16	4mm Hex Key
7	M10x150mm Vertical Seat Rail bolt	17	6mm Hex Key
8	Plastic Dome Cap	18	Owners Manual
9	Rear Seat Rail Bumpstop	19	Siphon
10	Seat Rail End Cap	20	3cc blue dye glass vial
		21	Water Treatment Pack (4x tablets)

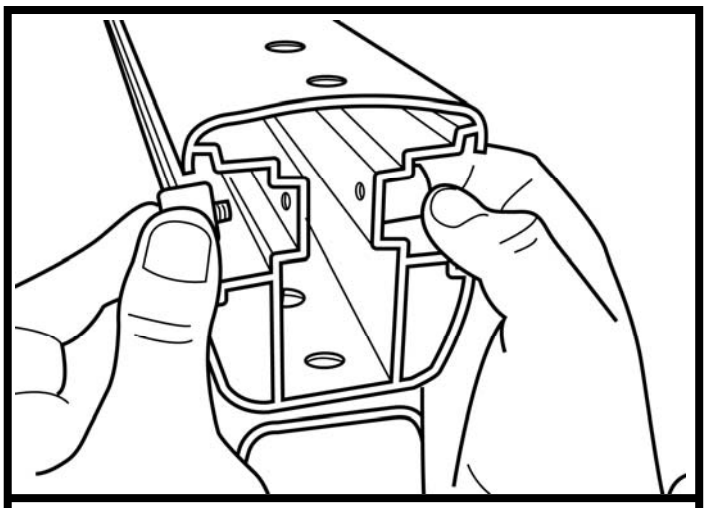
Installing the Seat and Rear Leg to Seat Rail

Install the Rower Seat onto the Seat Rail as shown, with seat indentation facing rearward.

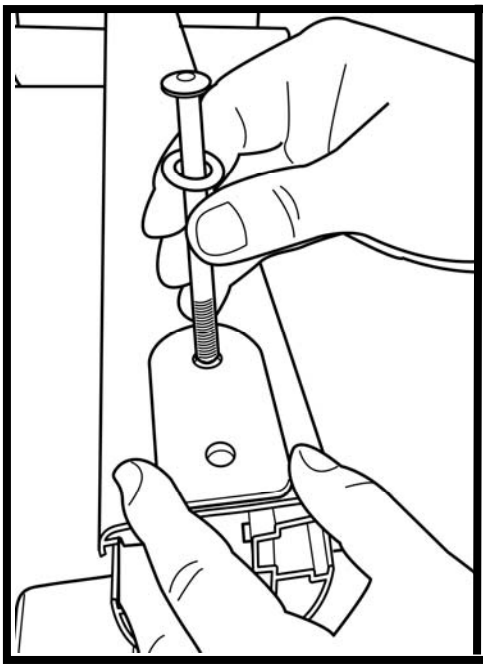




For this stage of assembly, you'll need the Rear Leg, Rear Rubber Bumpstops (2x), M10x120mm Bolts (2x), Washers, Seat Rail Bracket and Rubber End Cap.

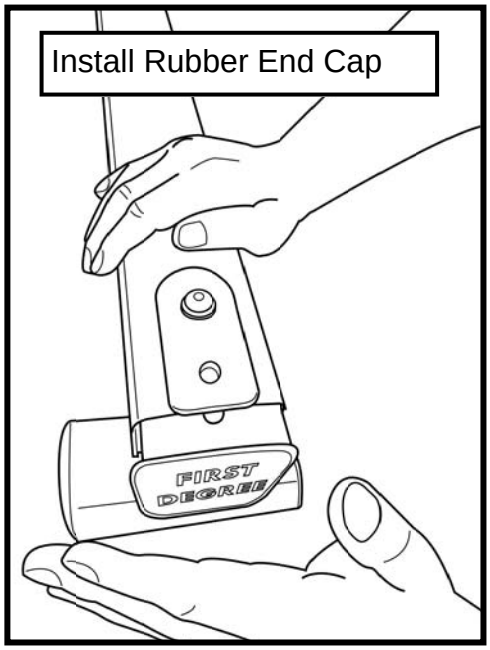


First, with the seat already installed on the rail, thread the Rear Rubber Bumpstops onto the end of the Seat Rail as shown.



Next, align the Rear Leg, Seat Rail and Seat Rail Bracket and install front Bolt/ Washer with the oval end of the Seat Rail Bracket facing forward as shown.

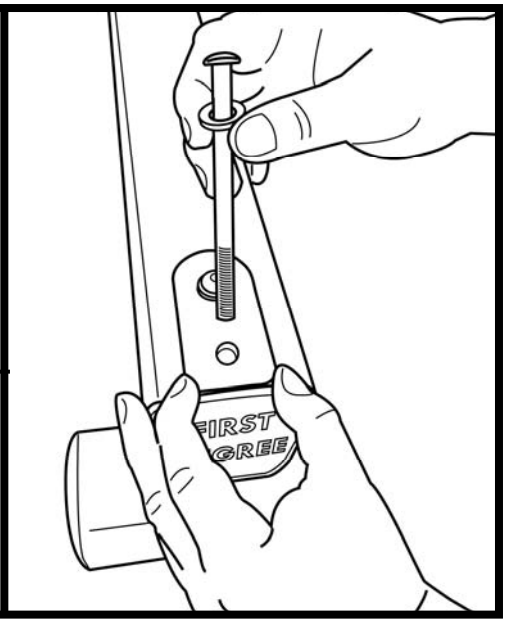
Do not tighten.



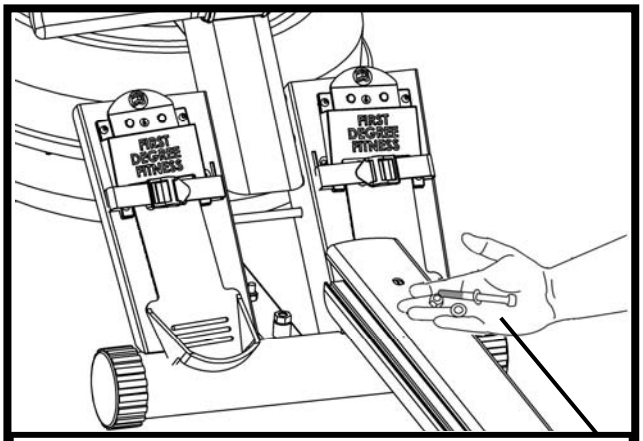
Finish the Rear Leg assembly by installing the second Rear Leg Bolt and Washer .

Tighten both bolts.

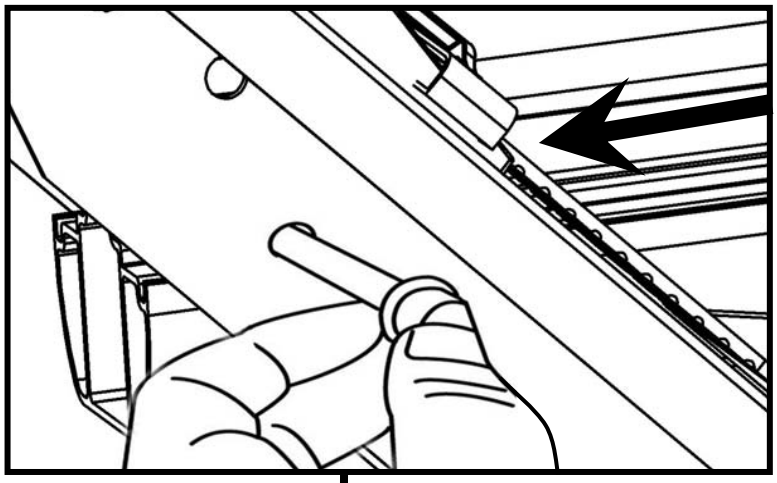
⚠ Use care when tightening bolts to avoid scratches.



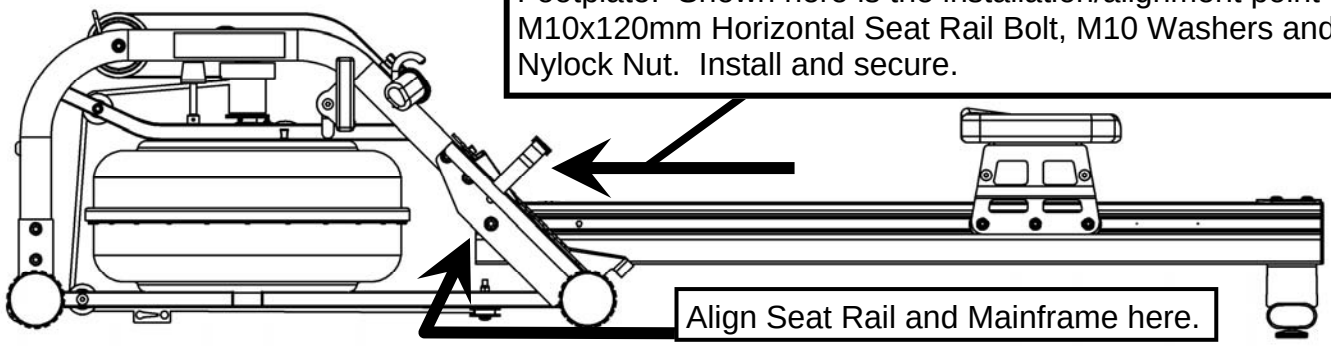
Installing the Seat Rail to Mainframe



M10x120mm Bolt, 2x M10 Washers and Nylock Nut.

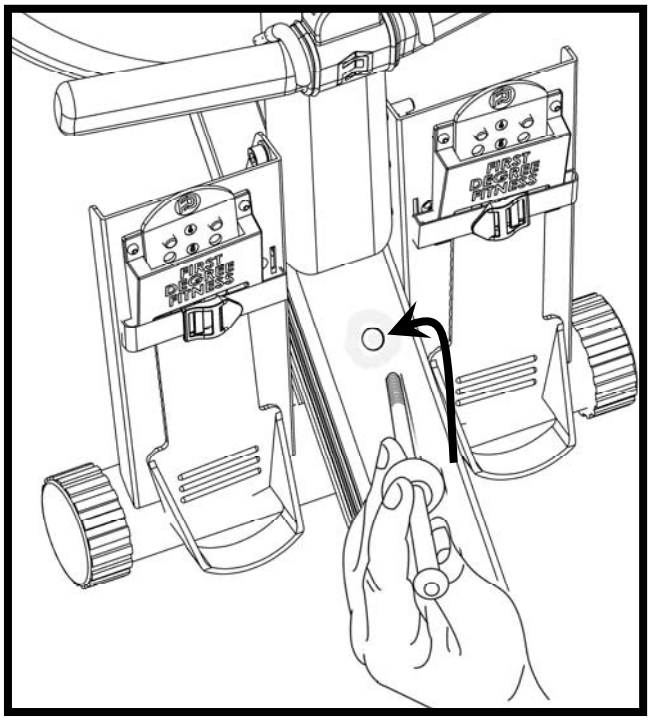


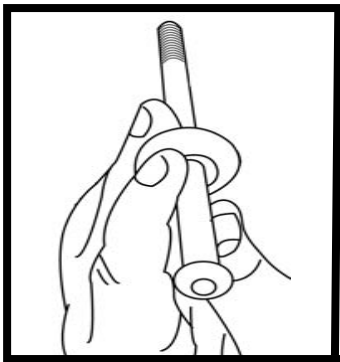
Insert the Seat Rail until it just slightly protrudes behind the Footplate. Shown here is the installation/alignment point for the M10x120mm Horizontal Seat Rail Bolt, M10 Washers and Nylock Nut. Install and secure.



Align Seat Rail and Mainframe here.

Installing the Vertical Seat Rail Tensioning Bolt





150mm Vertical Seat Rail Tensioning Bolt and Plastic Dome Cap.

Install the Vertical Seat Rail Tensioning Bolt through the Seat Rail as shown and into the lower frame.

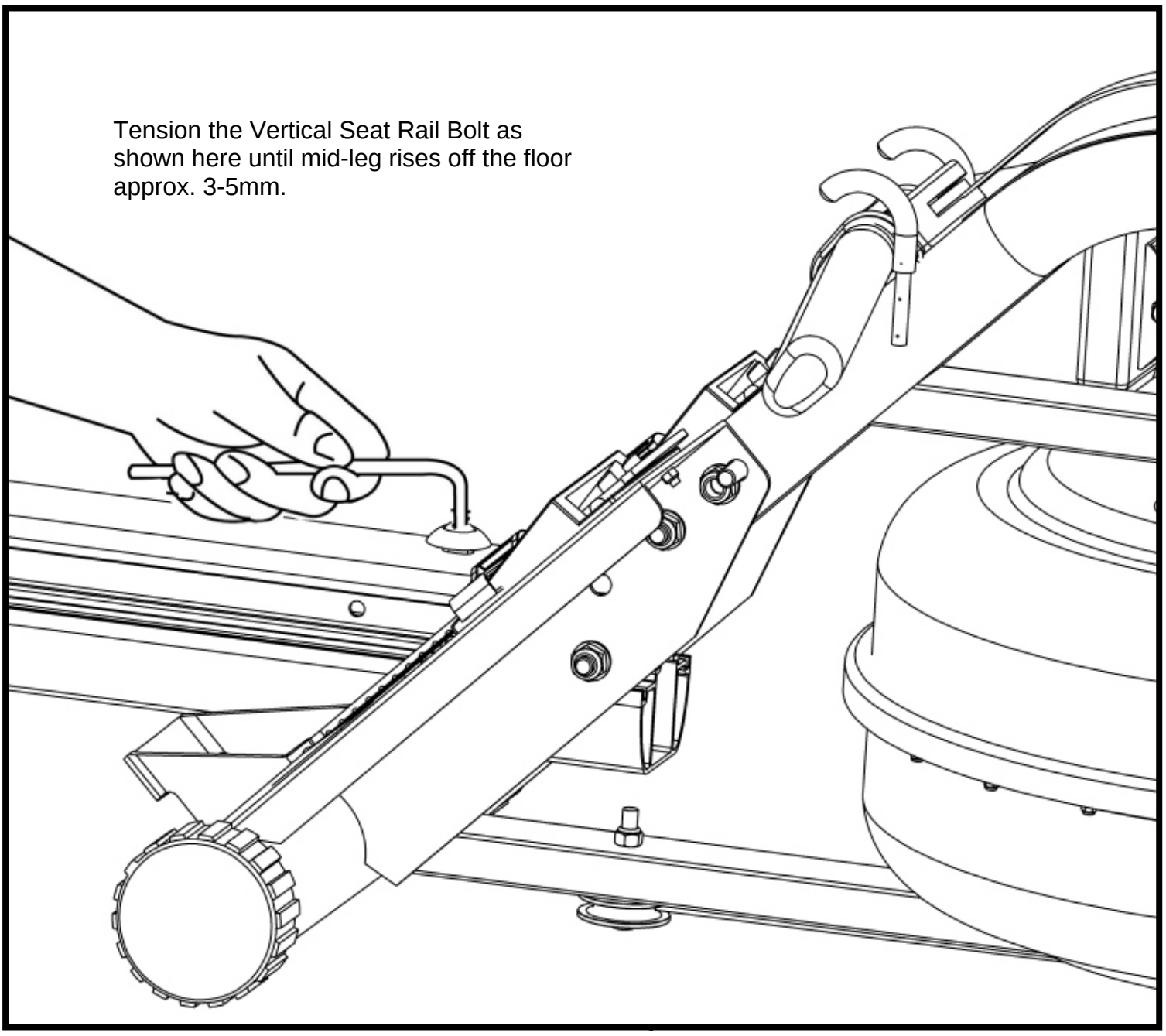
Do not tighten. See following page for correct height adjustment.

Fine Tuning the Trident Challenge AR:

The Vertical Seat Rail Tensioning Bolt is designed to hold the mid leg 3-5mm off the ground when the rower is unweighted, and just lightly touch the ground during a rowing stroke.

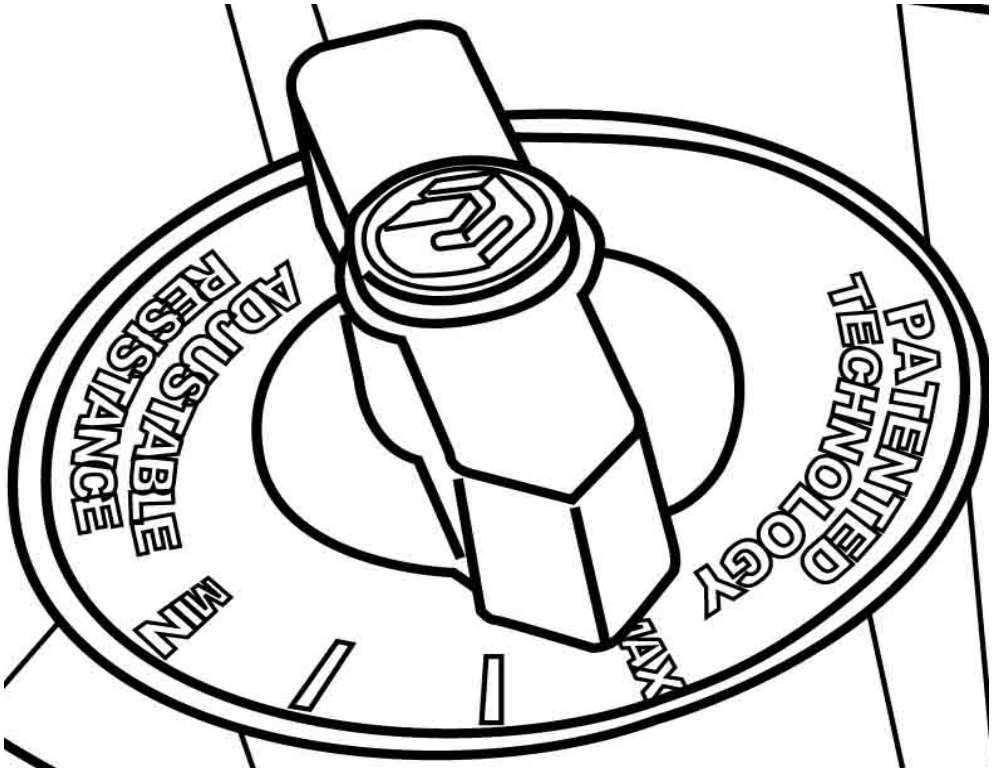
Tighten the assembly until the Mid Leg begins to lift off of the ground as shown below.

If excessive head shaking/hopping of the tank occurs during rowing, this indicates the Vertical Seat Rail Tensioning Bolt being out of adjustment.



The Fluid Adjustable Resistance 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 flywheel for heaviest resistance

_____

_____

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

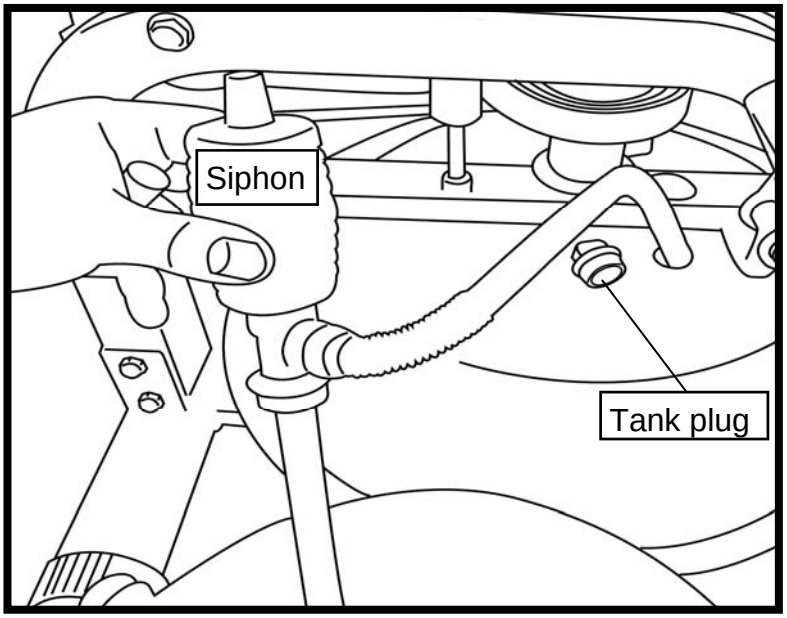
GETTING STARTED

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

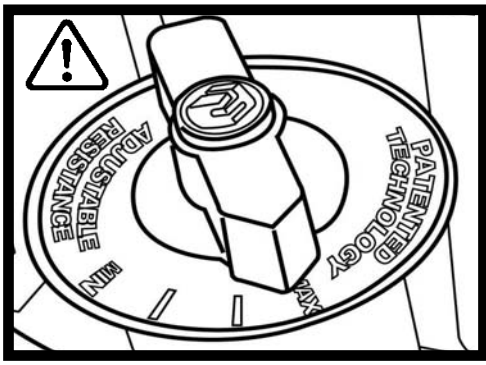
Once you have found a level that gives you the exercise required, changes can be made to SPM and to stroke intensity to further vary your energy input. Interval training is used by most Rowers, where a period of low intensity is combined with short intervals of high intensity. Your FDF Rowing Ergometer 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 on www.firstdegreefitness.com"

Tank Filling and Water Treatment:



Tank Filling and Water Treatment Procedures

Note: 17 liters of water is required for maximum filling.



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. **Note: Failure to set adjuster handle to max prior to filling will cause inaccurate fill levels and possible leakage**.

4. After filling tank to the desired water level, open the valve on the top of the siphon to allow excess water to escape.

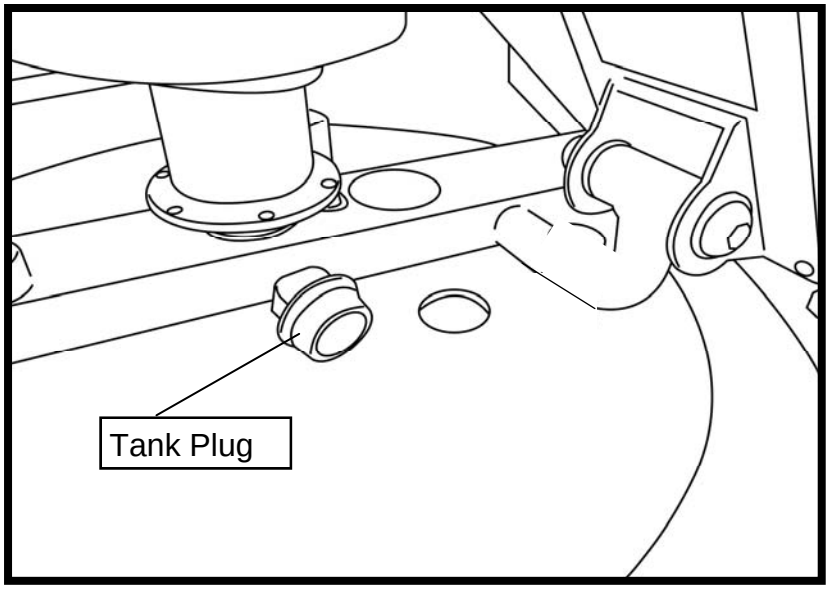
5. Ensure that Tank Plug is replaced once filling and water treatment procedures are complete.

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.

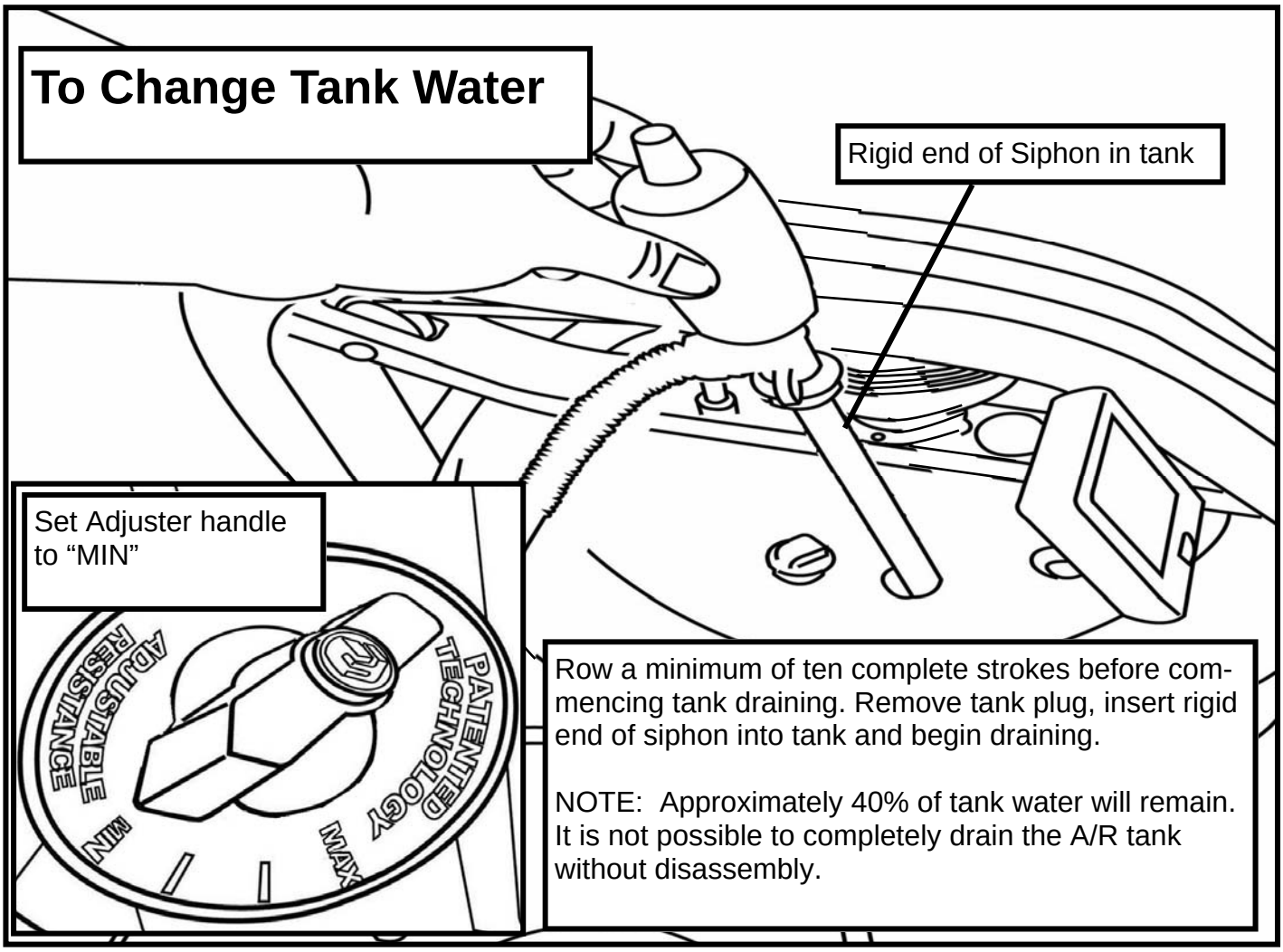
Water Treatment Procedures:

1. Add Chlorine tablet.
2. Enough Chlorine Tablets are supplied for many years of Water treatment. Add a chlorine Tablet whenever the Water appears dirty or cloudy.

WARNING: Only use First Degree Fitness Supplied Water treatment tablets.



Caution: Use a drop cloth under the tank both when filling 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**.**

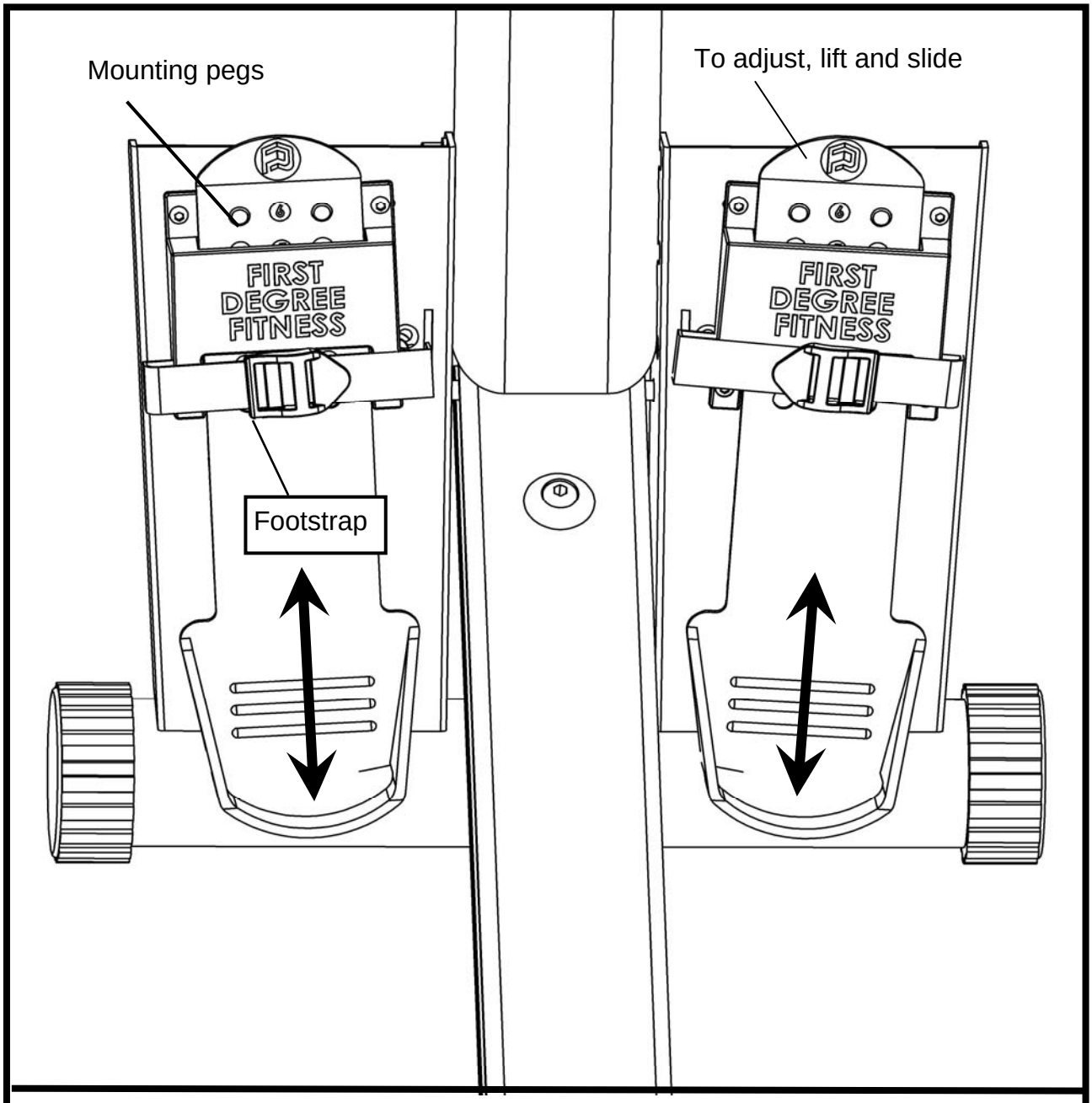
5. Drain tank (approx. 40% of water will remain) and then refill following directions for Tank filling as described in the Tank Filling section of this manual.

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 affects the water. Moving the rower away from direct sunlight and adding the blue dye will extend time 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.

4. For further details regarding rowing technique please refer to our international website at www.firstdegreefitness.com

How Often?

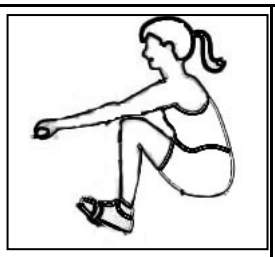
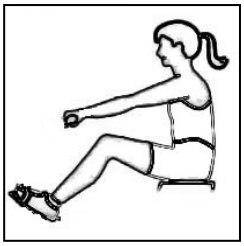
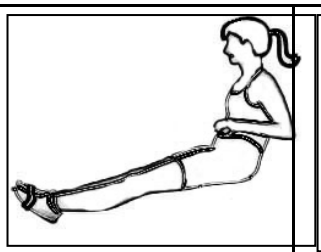
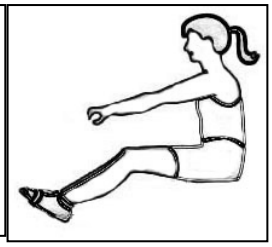
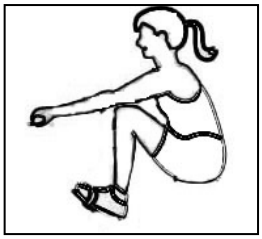
Begin with 5 minute training sessions once a day and aim for around 2:30 to 2:45 for 500m time. Row at a pace that keeps the water circulating continuously between strokes.

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

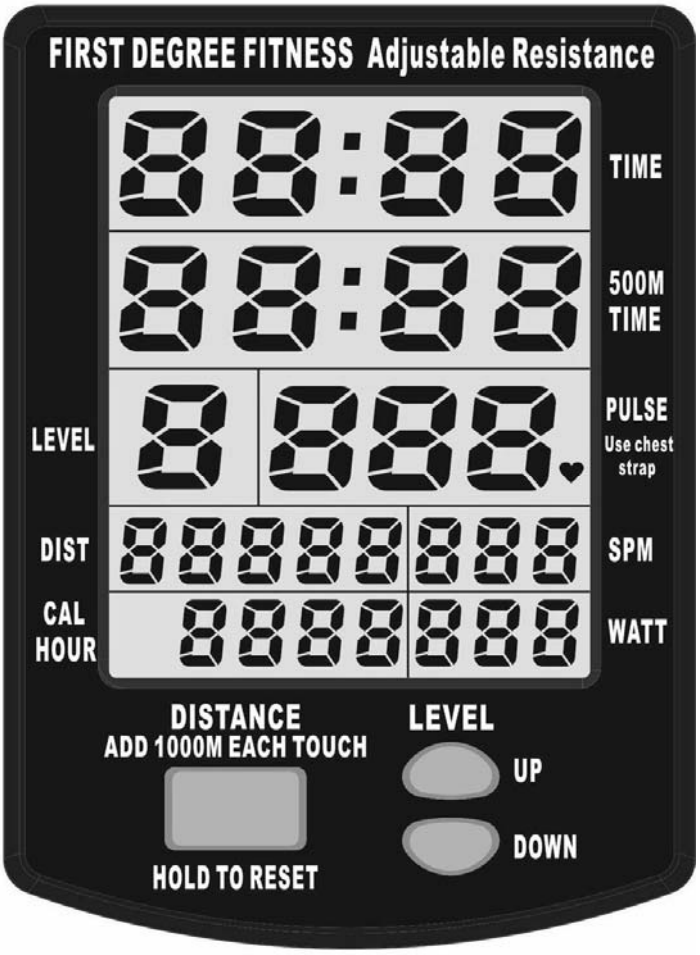
This will provide aerobic endurance benefits, muscle toning and sufficient calorie burning to form part of a weight loss program.

CAUTION

Always consult a doctor before beginning an exercise program.
Stop immediately if you feel faint or dizzy.

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

The Trident Challenge AR 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.

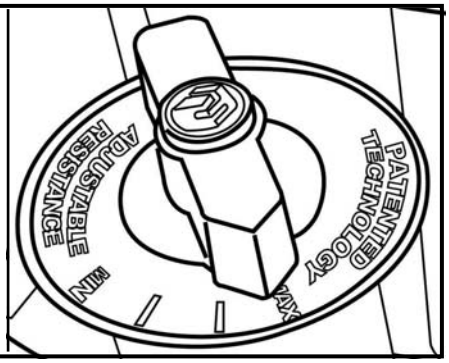
WATT: Unit of power updated per rowing stroke.

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: Level 4

MIN: Level 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).
   Download and Install NetAthlon 2 XF for Rowers from
   http://www.webracing.org/downloads.htm

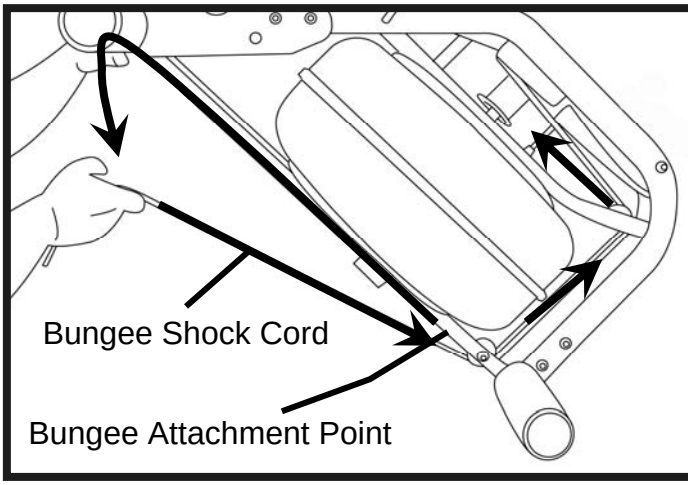
Connecting your console

- 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

Detaching the Rower Belt:

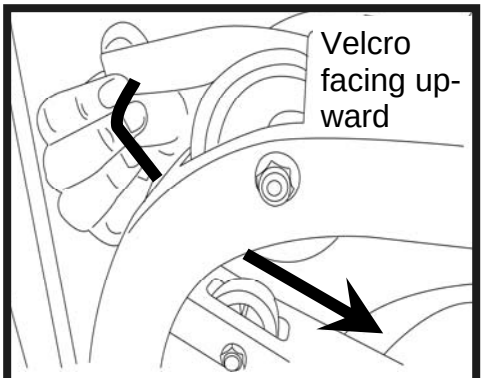


1. To detach belt, simply pull beyond the range of the normal rowing stroke until the belt detaches from the Belt Bungee Pulley.

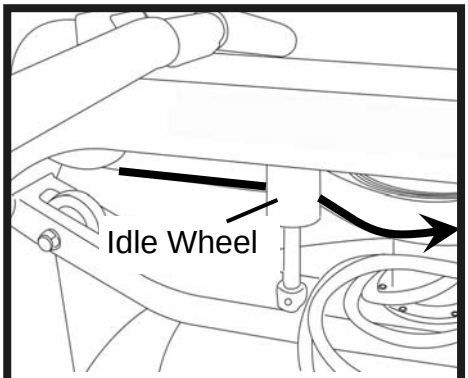
Tip: You'll hear the Velcro separating just before the belt detaches.

2. Cut plastic tie holding bungee at the Bungee Attachment Point, pull the Cord through all three pulleys and leave excess on top of the tank for now.

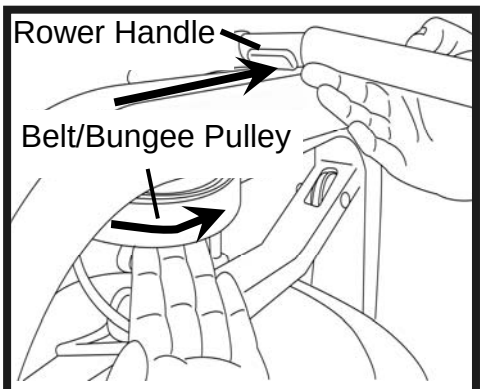
Reattaching the Rower Belt:



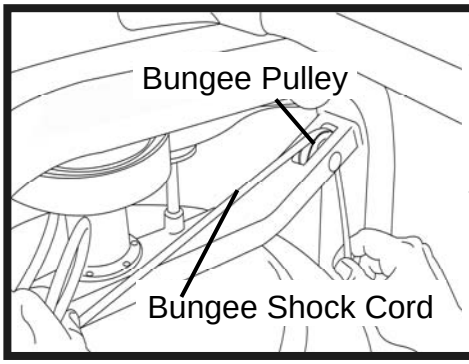
1. Begin reattaching the Rower Belt by threading around the Rower Belt Pulley with the Velcro side facing up-ward as illustrated.



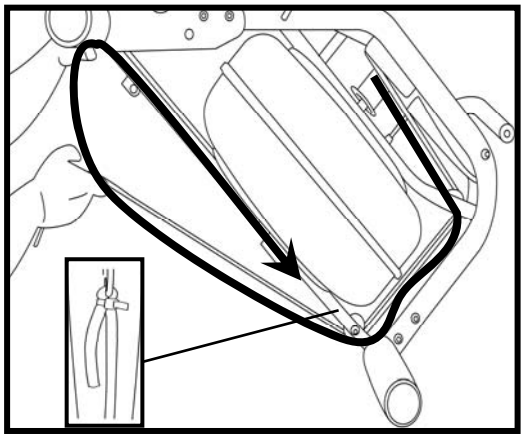
2. Next, thread the Belt around the Idle Wheel as shown. Once around the Idle Wheel, attach the Rower Belt to the Belt/Bungee Pulley. There is an obvious "lip" at the attach-ment point.



3. Wind the Rower Belt onto the Belt/Bungee Pulley until the Rower Handle is as it's furthest forward position.



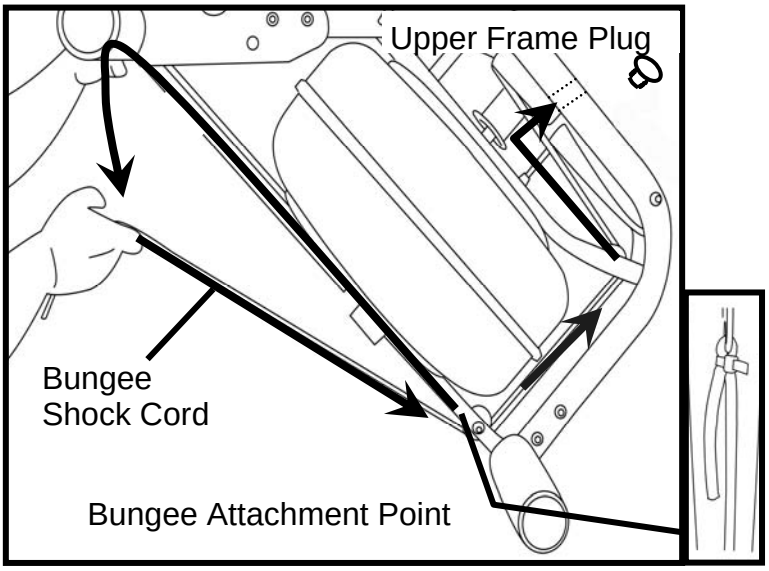
4. Rethread the Bungee Shock Cord (on opposite side of the Idle Wheel) back through the Bungee Pulleys and tie off at the Attachment Point.



Hint:

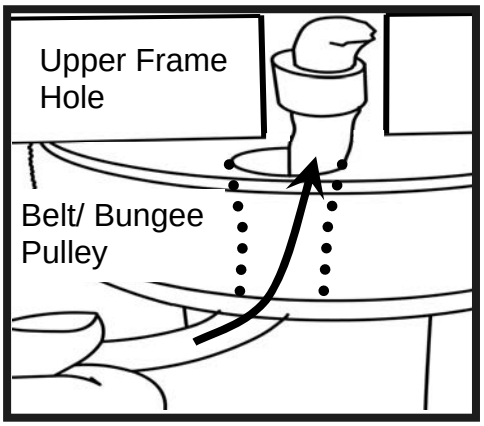
If Bungee Shock Cords previous tension seemed correct (a good way to judge is if the Rower Handle can make it to the furthest point forward on the top of the Mainframe under bungee tension alone) then simply tie off at previous position. If the return is too slack, experiment by tightening the tension in small increments and testing until the correct tension is achieved. If the Rower Handle cannot reach the end of the seat rail during a rowing stroke, then the Bungee Shock Cord is over-tensioned.

Removing the Bungee Shock Cord:

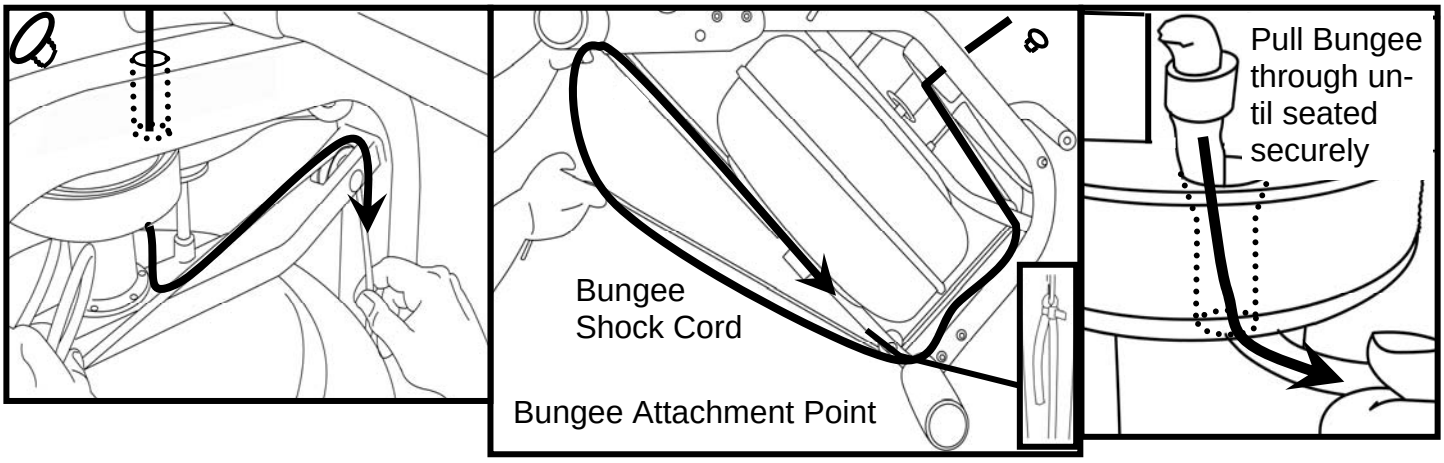


First, move the Rowing Handle to it's farthest forward point on the Mainframe, then cut the plastic end tie and follow the drawing above for bungee removal. Next, remove the Upper Frame Plug to allow the Bungee Shock Cord to be threaded through the top of the frame. Note: You will need to rotate the Belt/Bungee Pulley to align the holes properly. Should the belt drop off of during the bungee change, please refer to the previous pages for "Attaching/Reattaching the Rower Belt".

Once Bungee Cord and Upper Frame Hole are aligned, push the Bungee Cord up and through the frame as shown



Replacing the Bungee Shock Cord:



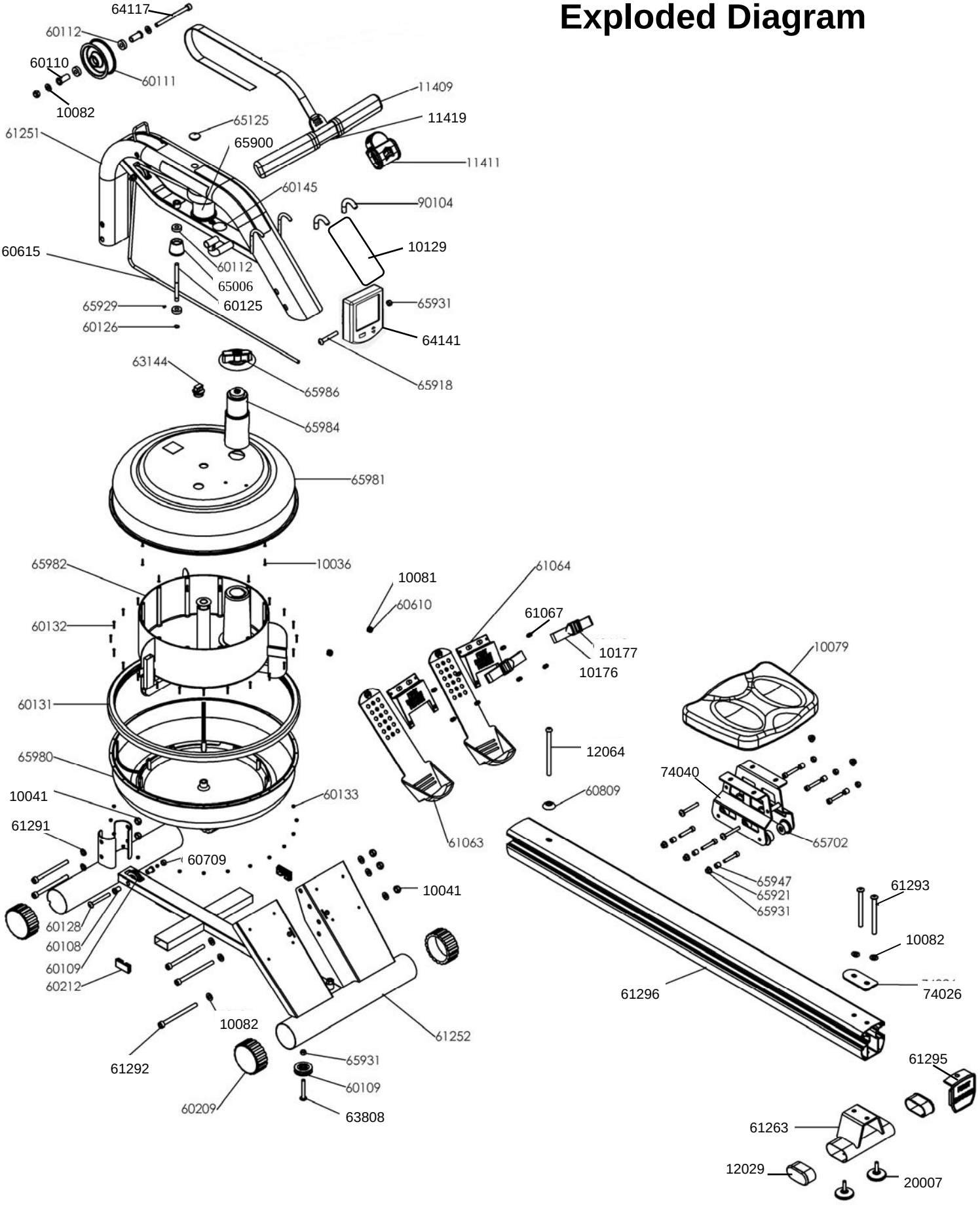
Reinstall the Shock Cord through the Upper Frame, along the opposite side of Idle Wheel, through the Mid Frame and Lower Bungee Pulleys and then tie off with plastic tie wrap to correct tension. Replace Frame Plug

Tip: Correct bungee tension is achieved when enough recoil is present for the Rowing Handle to easily reach the front of the Rower Pulley Belt Bracket at the far front of the frame. If the Rowing Handle will not reach rearward to the end of the Seat Rail, the Bungee Cord is over-tightened and will require adjustment.

Troubleshooting:

Fault	Probable Cause	Solution
Water changes color or becomes cloudy.	Rower is in direct sunlight or has not had water treatment.	Change rower location to reduce direct exposure to sunlight. Add water treatment and blue dye or change tank water as directed in the water treatment section of this manual.
Rower belt slipping off belt/ bungee pulley.	Bungee not under enough tension.	Tighten bungee cord following the instructions in "Replacing the Bungee/Shock Cord" section of this manual.
Front of rower lifts slightly during vigorous rowing.	M10X150mm Vertical Seat Rail Tensioning Bolt is slightly too loose.	Tighten bolt 1/2 turn and row again. Tighten as needed until problem stops. Note: Over tightening this bolt can damage the seat rail. Only tighten bolt in small increments until fault is corrected.
The Trident Challenge AR computer does not illuminate after battery installation.	Batteries installed incorrectly or need replacing.	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.
Trident Challenge AR Computer screen illuminates, but does not register when rowing.	Loose or failed connection.	Check that the computer lead is connected properly. If it is connected then contact your local service center.

Exploded Diagram



Parts List

P/N	Qty	Description	P/N	Qty	Description
10036	12	Grub Screw M3x20 SUS	61067	8	Bolt M5x15
10041	6	Nut M10 Nylock	61251	1	Upper Main Frame with Decals - TRIAR
10079	1	Seat LS-E28	61252	1	Lower Main Frame - TRIAR
10081	2	Washer M6x16	61263	1	Rear Leg - TRIAR
10082	8	Washer M10	61291	2	Curved Washer M10
10129	1	Decal - "How to Row "	61292	3	Bolt M10 x 120
10176	2	Foot Strap & Buckle #10177	61293	2	Bolt M10x130
11409	2	Handle Grip - Deluxe	61295	1	End Cap - Rail TRIAR
11411	1	Handle Rubber Cover - Deluxe	61296	1	Rail with Decals - TRIAR
11419	1	Handle with Belt and Grips-TRIAR/VIKAR	63144	1	Tank Plug
12029	1	End Cap - Rear leg	63808	2	Bolt M8 x 60
12064	1	Bolt M10x150	64117	2	Bolt M10X120
20007	2	Foot Levelers M8x30 Hardened Rubber	64141	1	Computer with USB- AR
60108	2	Bungee Pulley Spacer 8mm	65006	1	Idle Wheel Complete with Bearing and Shaft - TRI/VIKAR
60109	2	Bungee Pulley 50mm with Bearing	65125	2	Rubber End Cap - Main Frame
60110	1	Belt Pulley Spacer	65702	6	Seat Wheel
60111	1	Belt Pulley 100mm & 2x Bearing #60112	65900	1	Belt/Bungee Complete with Bearings, Velcro
60112	2	Belt pulley bearing 6000ZZ	65918	1	Bolt M10x60 -B
60125	1	Idler Pulley Shaft	65921	5	Washer 8.5x19x1.6t - B
60126	2	C Clip 10mm	65929	1	Grub Screw M4x6 - B
60128	1	Bolt M8x65	65931	7	Nut Nylock M8 -B
60131	1	Tank Outer Rubber Protection Ring	65947	1	Seat Wheel Short Spacer - B
60132	24	Screw M3x20	65980	1	Lower Tank Shell
60133	24	Nut Nylock M3	65981	1	Upper Tank shell—Outter
60145	1	Frame Plug 38.1mm	65982	1	Inner Reserve Tank Shell / AR
60209	4	End Cap 76.2mm Round	65984	1	Tank adjuster inner cup
60212	2	End Cap 25x50mm	65986	1	Adjuster Knob
60610	2	Screw M6x15	74026	1	Rail Bracket VX1/TRIAR
60615	1	Bungee Cord 8mmx1950 & Clip #60617 & Tie #61008	74040	2	Seat Bracket - VX1/TRIAR
61063	2	Footplate Slider	90104	2	Rubber Hook Cover
61064	2	Footplate Slider Base			

FLUID ROWER (model TRIAR)

INTERNATIONAL WARRANTY – FULL COMMERCIAL USE

This product is designed and constructed for use in any Health Club / Fitness Studio application.

First Daegree Fitness Limited warrants that the **Trident Challenge AR Rower (model TRIAR)**, 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 Frame – 10 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 10 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.

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, belt and pulley
Hand grips & foot straps
Polyester rowing belt
Seat
All pulleys, rollers & bearings
All rubber components
Computer & speed sensor (excluding replaceable batteries)
All drive belts
Aluminum seat rails
Sliding footplates

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