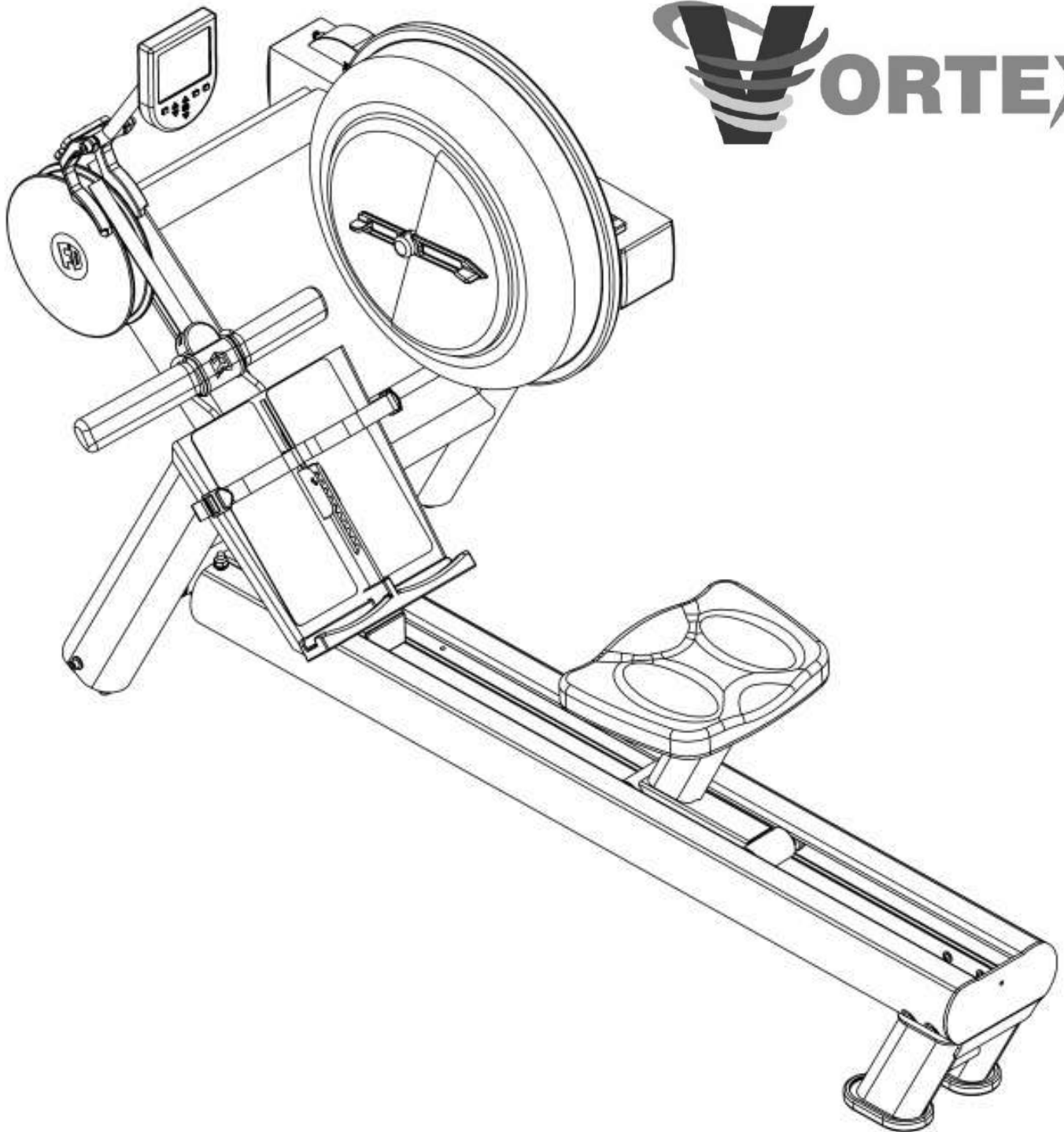


Owners Manual



VX-3 *Fluid* **ROWER**



FIRST DEGREE FITNESS
FLUID INNOVATION

www.firstdegreefitness.com



Contents

1. Contents of VX-3 Pack.
2. VX-3 Assembly Instructions.
3. Tank Filling and Water Treatment.
4. Long Term Water Treatment and Basic Operation .
5. The VX-3 Rower Ergometer with USB Function.
6. How to Row.
7. Maintenance Chart.
8. Troubleshooting Guide.
9. Adjusting the Tank Drive Belt.
10. Replacing the Bungee Shock Cord.
11. Exploded Diagram and Parts List.
12. Warranty.

Training with the VX-3

1. As with any piece of fitness equipment, consult a physician before beginning your VX-3 exercise program.
2. Follow instructions provided in this manual for correct foot position and basic rowing techniques.



CAUTION

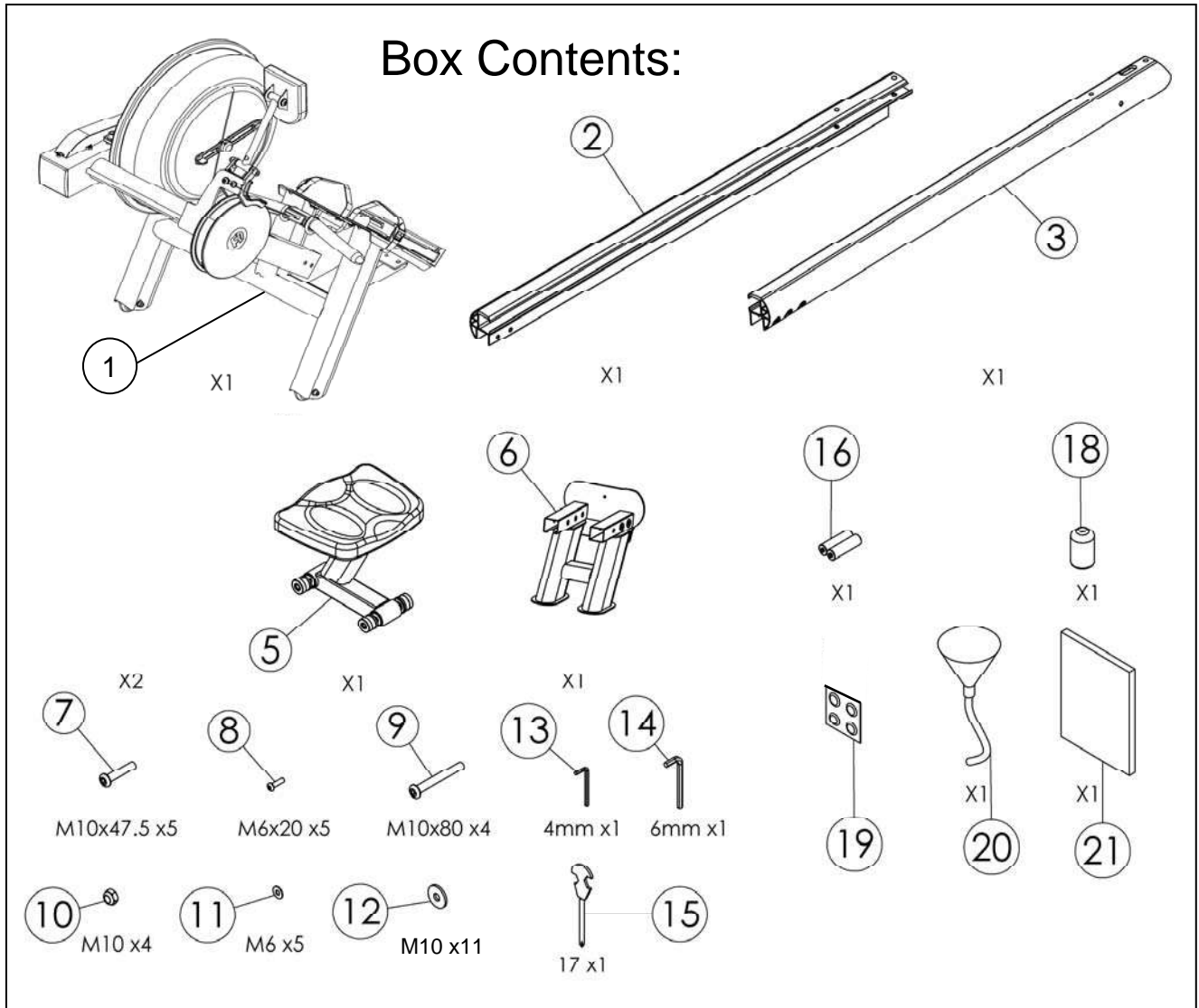
1. The VX-3 can stand for storage. When doing so, please follow the instructions given on the basic operation section of this manual.



CAUTION

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

Box Contents:

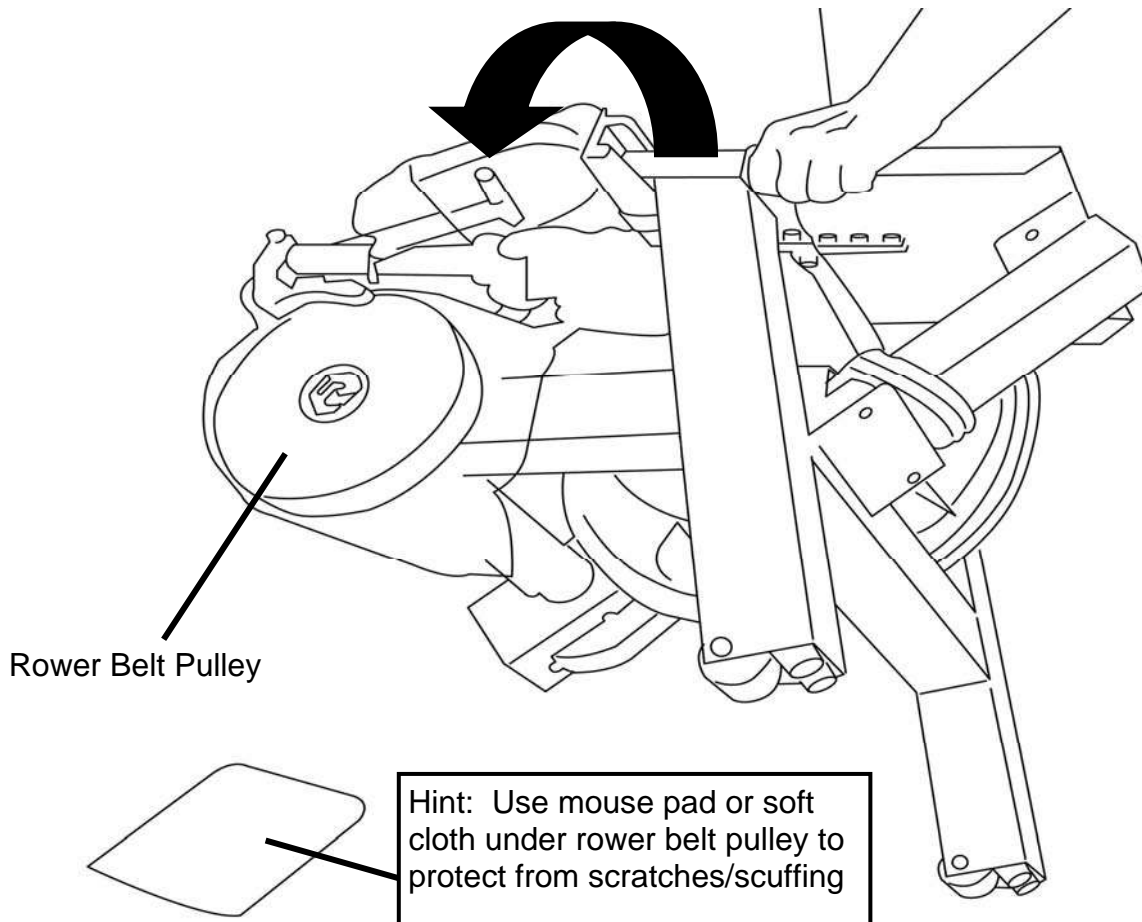


Item	Qty	Description	Item	Qty	Description
1	1	Mainframe and Tank	11	9	Washer M6
2	1	Seat Rail Left	12	11	Washer M10
3	1	Seat Rail Right	13	1	4mm Hex Key
5	1	Rower seat	14	1	6mm Hex Key
6	1	Rear leg	15	1	Multi-tool
7	5	Bolt M10 x 47.5	16	2	AA batteries
8	9	Bolt M6 x 20	18	1	Touch up paint
9	*4	Bolt M10 x 80	19	1	Chlorine tablets
10	4	Nut M10 Nylock	20	1	Funnel and hose
			21	1	Owners Manual

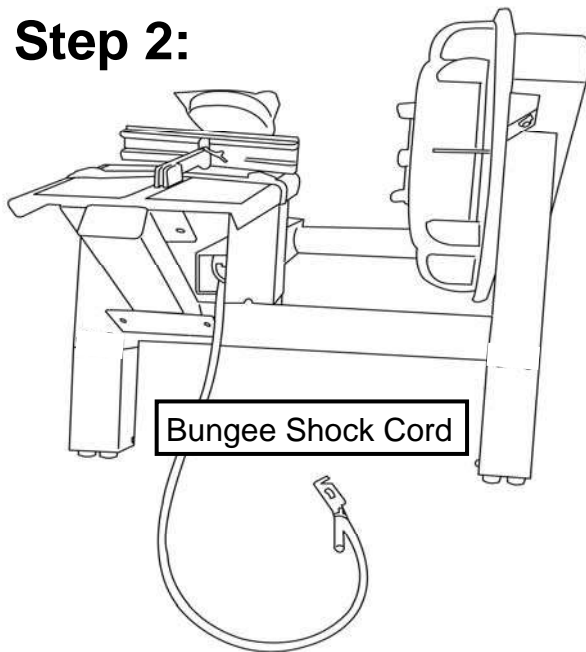
* Note Hardware pack contains 2x M10x80 bolts only. The remaining bolts are pre-installed on the Rower seat rails for assembly convenience.

Caution: Do not free the Rowing Handle, Heel Adjuster or Computer Stalk before assembly is complete.

Step 1: Remove mainframe and all components from mainbox. Check that all parts are present. Slowly stand Rower mainframe upright.



Step 2:



Locate and unwrap the Bungee Shock Cord from the frame before moving on to the installation of the Seat Rails.

Once the rower is safely standing upright on a stable surface, locate and unbox the left/right Seat Rails and hardware kit for the next step of assembly.

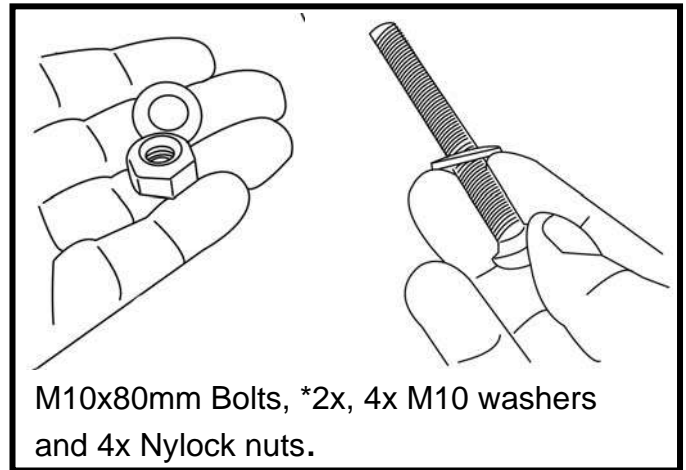
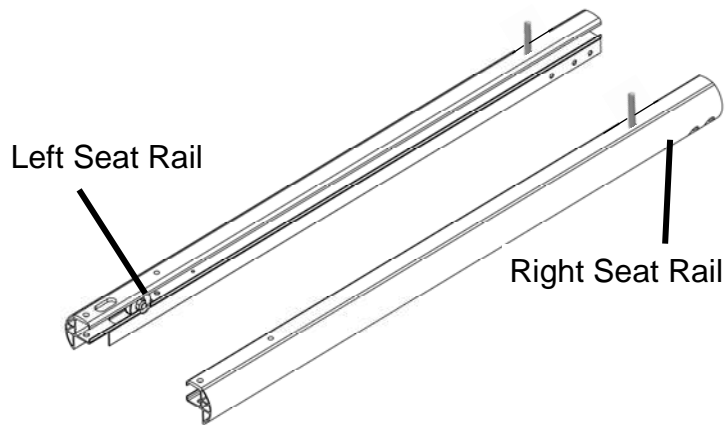
Note: The seat assembly bolts (4x M6x20) are pre-installed on the rower seat.

CAUTION: The VX-3 components such as mainframe and seat rails are heavy. Use care during assembly.

WARNING: The VX-3 seat rails can have sharp edges on the front portion facing the mainframe.

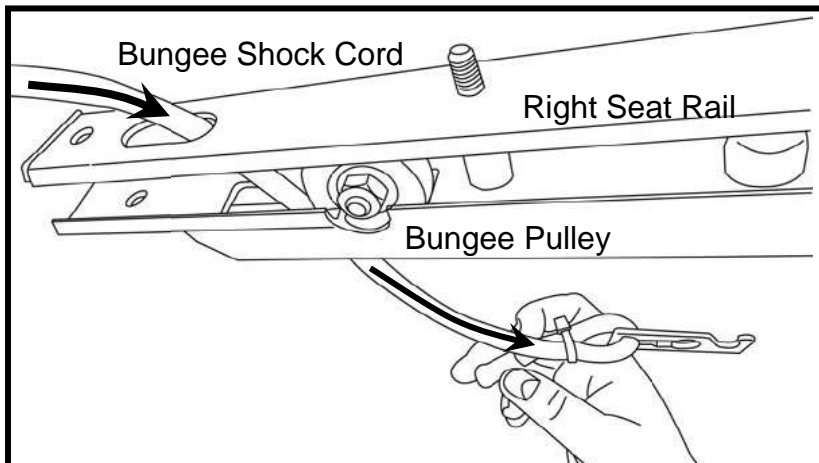
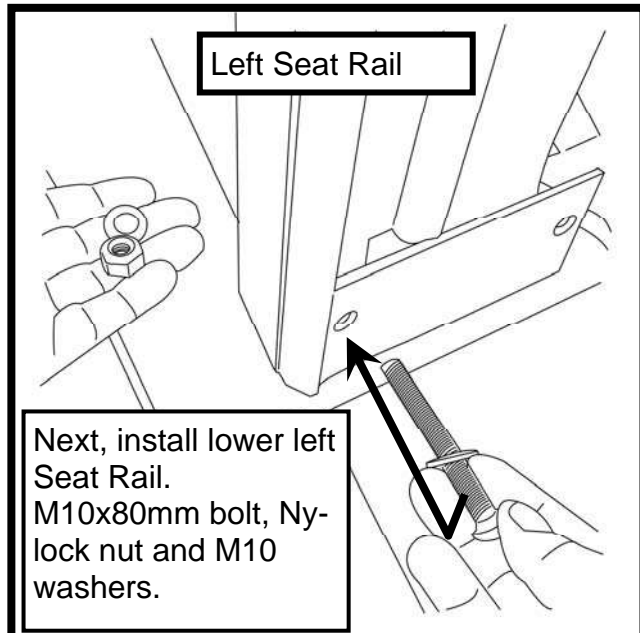
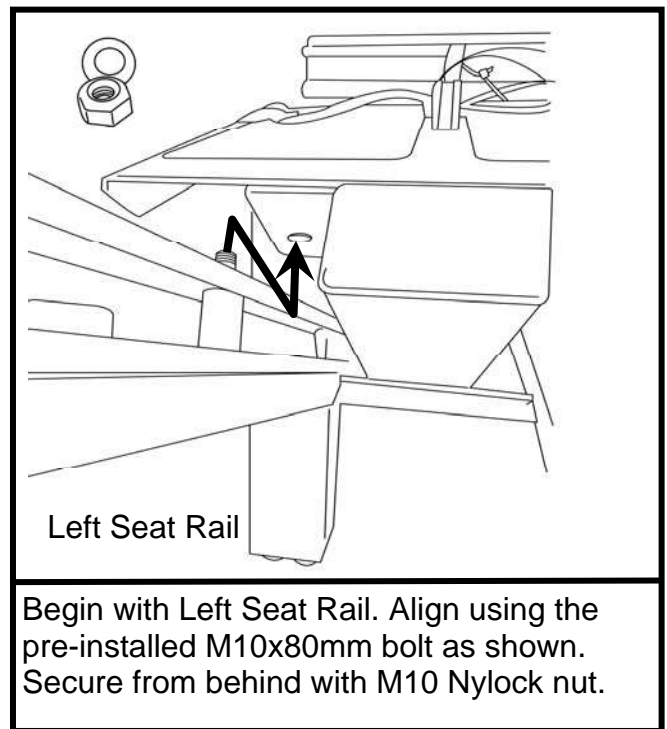
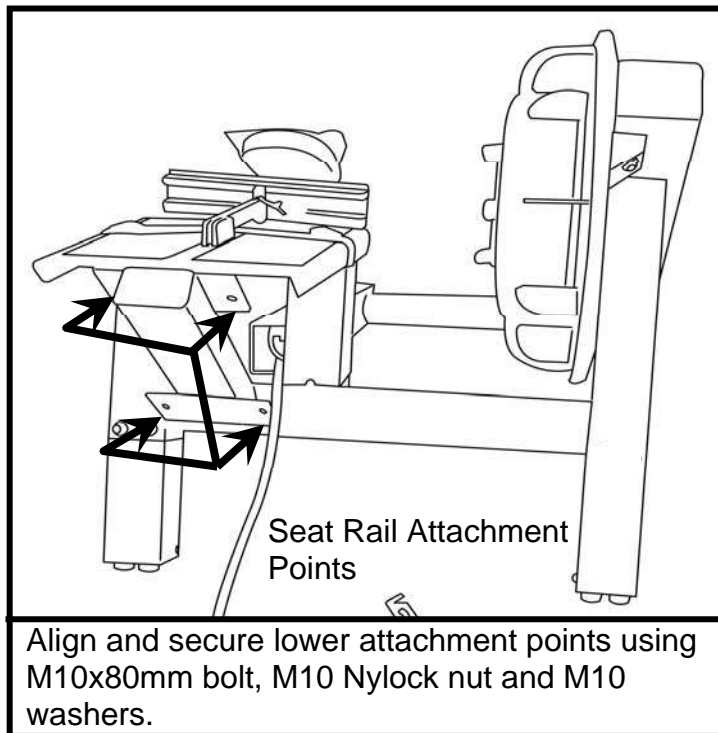
Use caution during assembly.

Step 3: Attaching Seat Rails to Frame



This portion of the assembly requires the Mainframe, 1x Left/1x Right Seat Rail, 2x M10x80mm Bolt, 4x M10 Nylock nut.

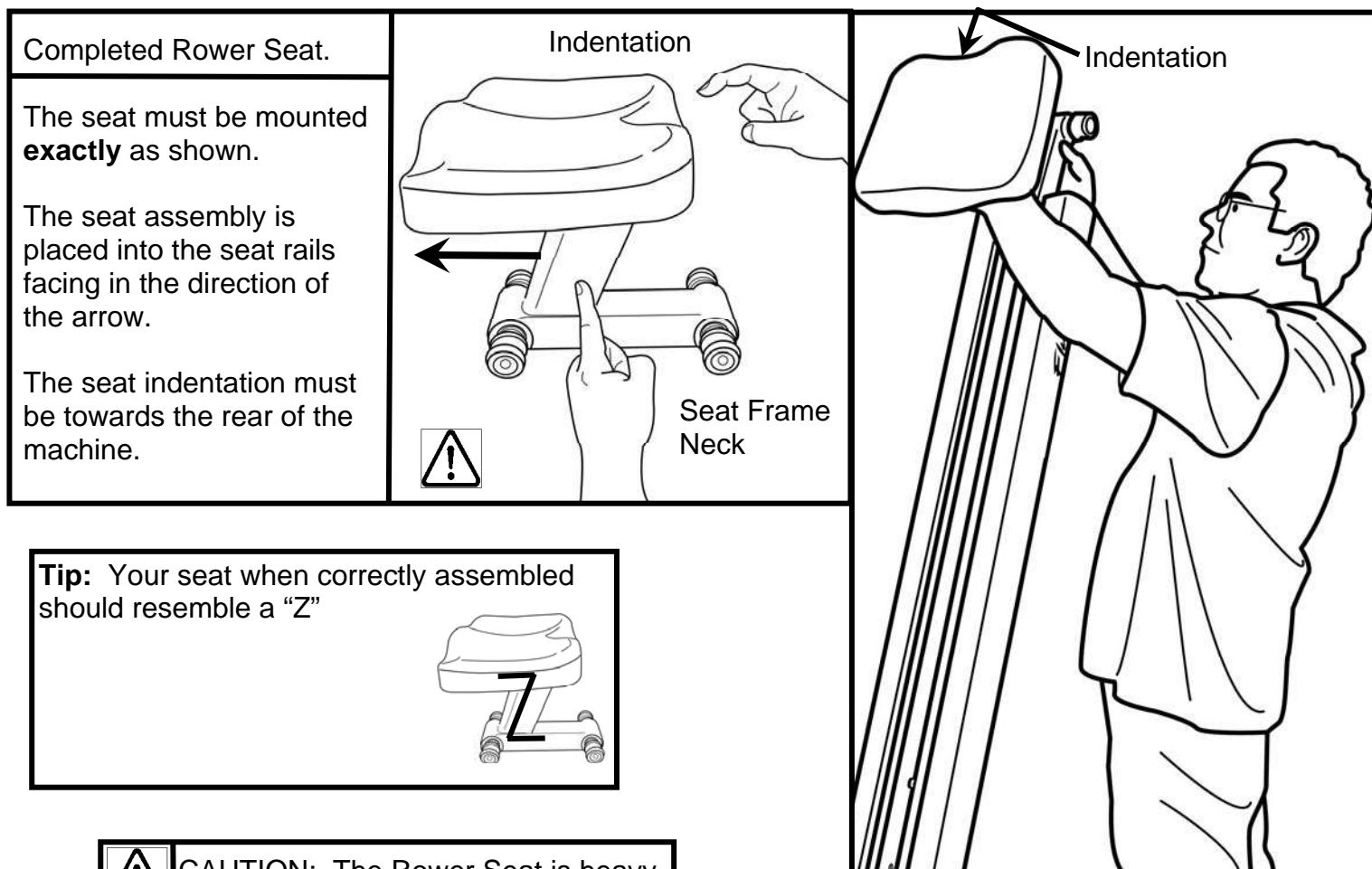
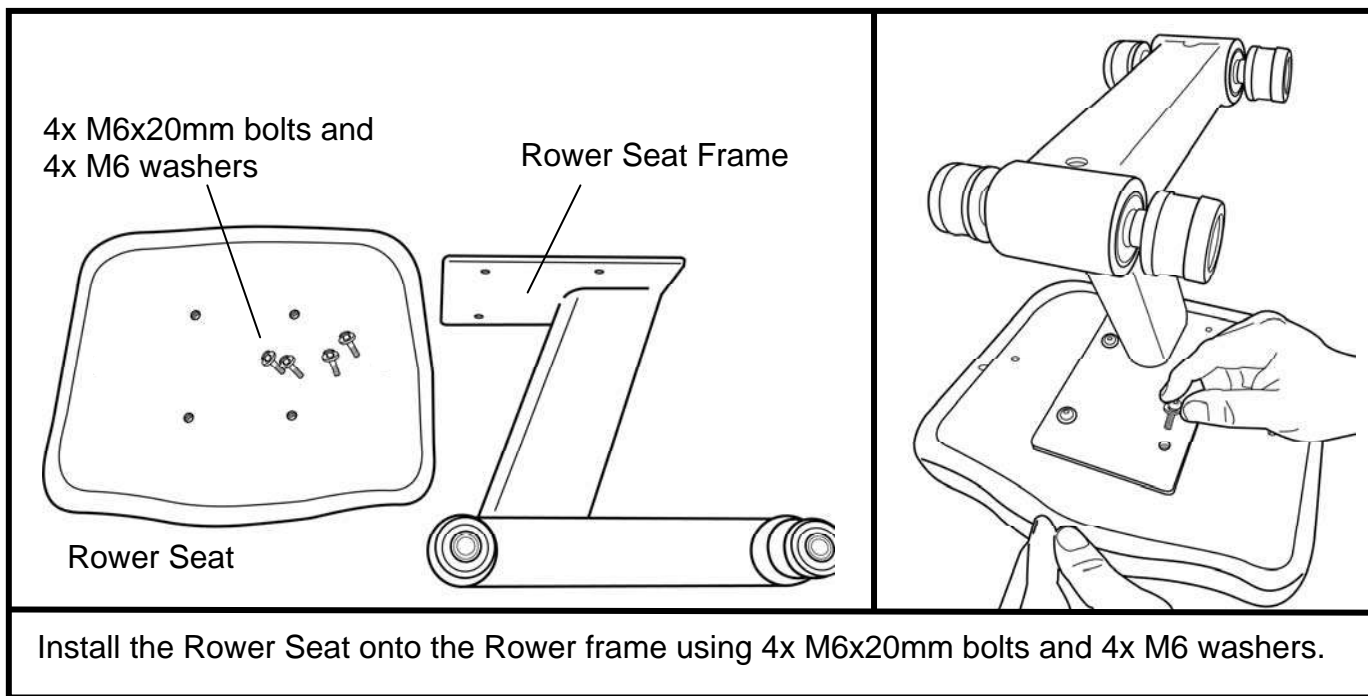
*Note: 2x M10x80mm bolt/spacer are pre-installed on the Seat Rails for your convenience.



Before installation of the Right Seat Rail, thread the Bungee Shock Cord through the top of the Seat Rail, around the Bungee Pulley and out the bottom as shown.

Once this is complete, repeat the same assembly procedure as used on the Left Seat Rail.

Step 4: Rower Seat Assembly



CAUTION: The Rower Seat is heavy. Use both hands and keep fingers clear of rower channels when guiding seat down the seat rails.

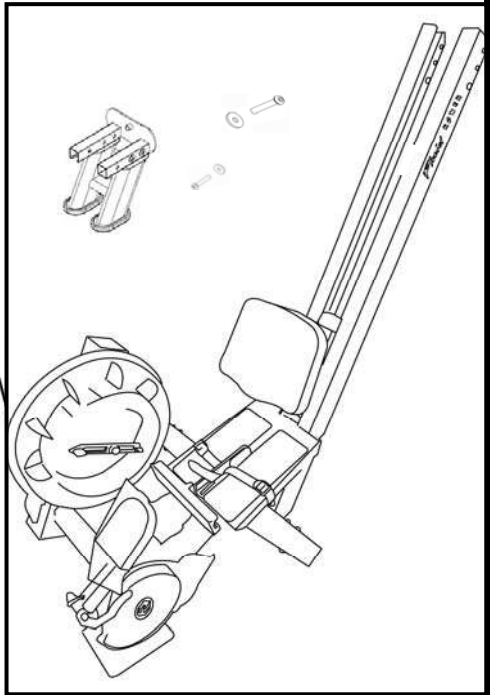
Step 5: Installing the Rear Leg

Rear Leg, 5x 10x47.5 bolts 5x M10 washers, M6x20mm bolts and M6 washers. Mount the Rear leg onto Seat Rails and Secure as shown below.



Tip: Install all M10x47.5 bolts first from the outside to hold the Rear Leg in position before securing from the inside with the M6x20mm bolts and M6 washers.

Rear Leg

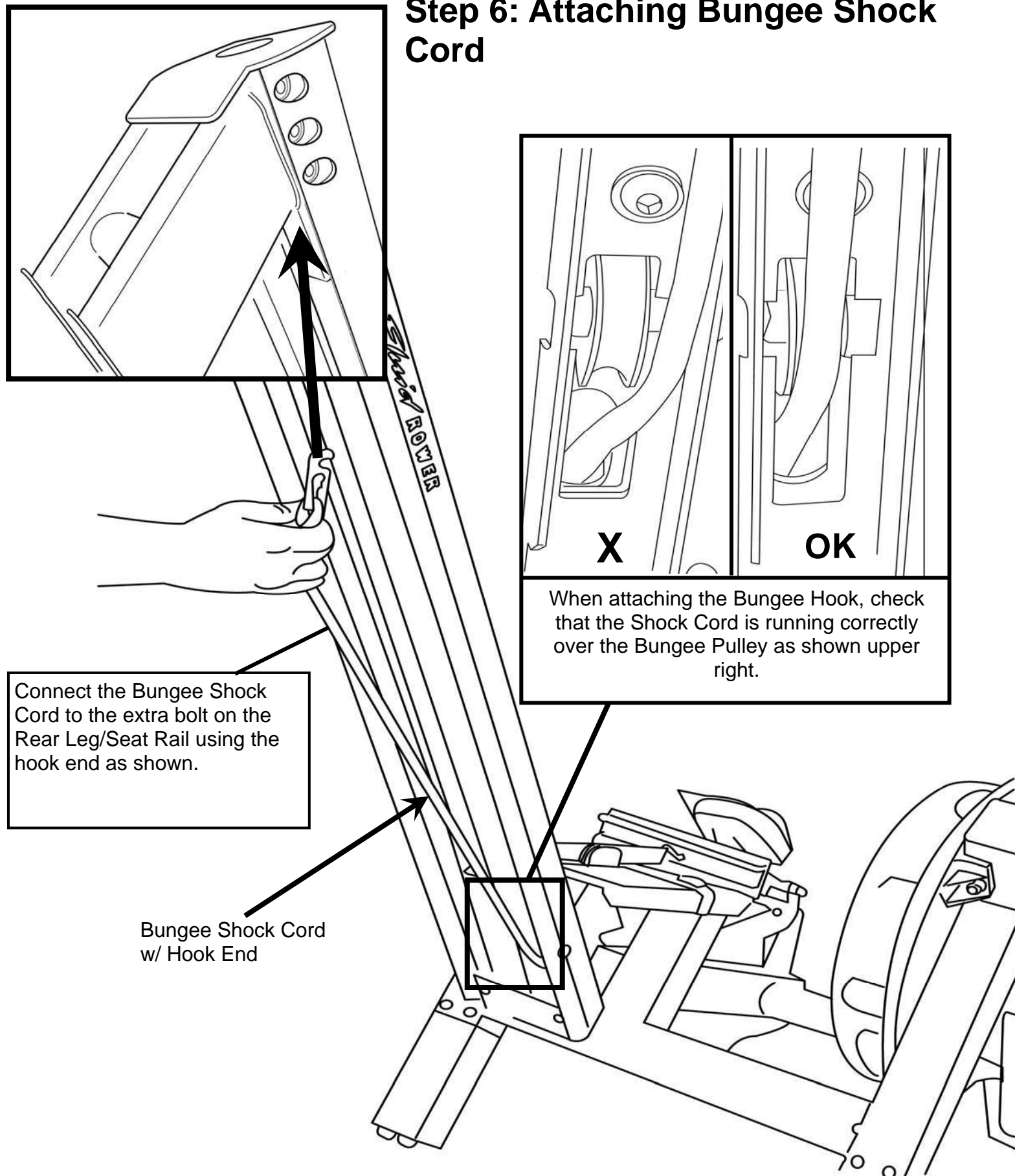


Note: Third bolt hole on right of Rear leg and Seat Rail is for bungee hook attachment.

M6x20mm bolt
and M6 washer

M10x47.5mm bolt
and M10 washer

Step 6: Attaching Bungee Shock Cord



CAUTION: The bungee shock cord will be under tension when stretching to install. DO NOT LET GO OF THE BUNGEE WHILE UNDER TENSION AS THIS COULD CAUSE INJURY AND/OR DAMAGE TO THE ROWER.

Computer stalk

Step 7: Completing the Installation:

WARNING: Do not free the rower handle before Step 6 (Attaching Bungee Shock Cord) has been completed.

Rower
Handle

Heelplate

To complete the assembly, free the Heelplate, the Rower Handle and computer stalk.

Install the 2x AA batteries into the computer.

Tank Filling and Water Treatment



Note: A large bucket is required for filling (Not included)

In areas where tap water quality is known to be poor, FDF recommends the use of distilled water.

Open the rear upper Yellow Tank Plug and insert hose into tank (rotating the impeller slightly may be necessary to allow the hose to pass), move the Tank Adjuster Handle to level 20 and begin filling. Do not fill the tank higher than the level indicator on the front of the clear shell. A properly filled tank holds approximately 8liters of water.



Warning:

Do not under any circumstances put fingers into the tank. Use the end of the hose to move the impeller should the need arise.

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.

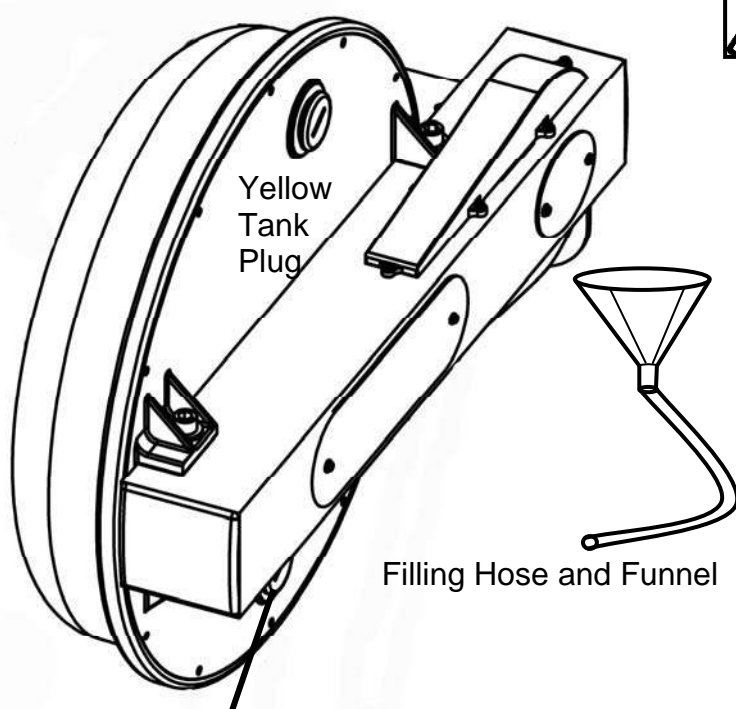


Caution:

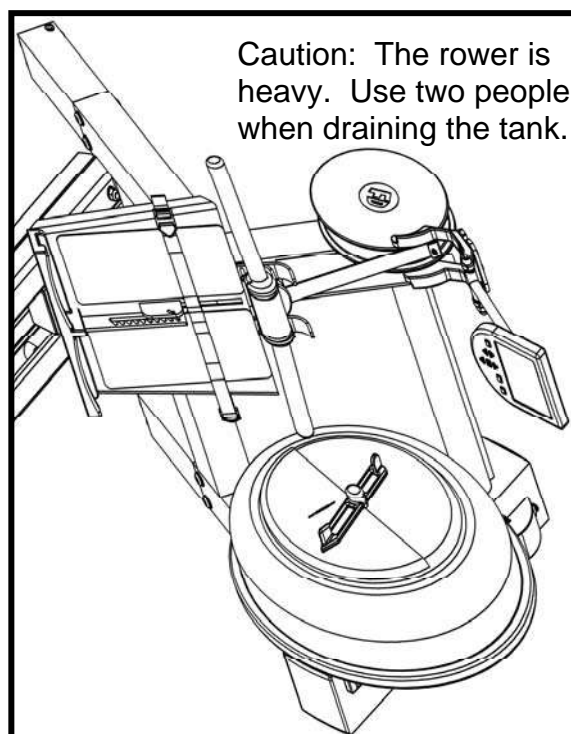
Use a drop cloth under the tank when filling the tank to avoid damage floor or carpet

Draining the Fluid Tank:

When draining indoors, a suitable container capable of holding 8 liters of water is required. Open the Yellow Tank Plug, and on a protective surface, turn the VX-3 on its side as shown above. Once the rower is in this position, the tank can be easily drained.



Use a drop cloth for splash and stain protection.



Note: the lower Black Tank Plug is permanently sealed.

Long Term Water Treatment and Basic Operation



CAUTION: Do not fill past the calibration mark as indicated on the tank level sticker or water spillage may occur. See Tank Filling and Water Treatment page for details.

Long Term Water Treatment:

Do not use any water treatment other than the tablets supplied with this machine. For replacement tablets, contact your local First Degree Fitness distributor.

Water treatment schedules for the VX-3 will vary according to the fluid tanks exposure to sunlight, but expect 8-12 months near a bright, sunlit window and 2 years or more for a darker location. At the point of finding the water slightly cloudy, add a Chlorine tablet. Remember to wait 72 hours following the chlorine tablet before adding the blue dye as the Chlorine tablet is extremely concentrated.



CAUTION: It is strongly recommended that a drop cloth be used under the fluid tank whenever the tank plug is opened for water treatment. The blue dye treated water will readily stain carpet or clothing.

Vertical Storage:

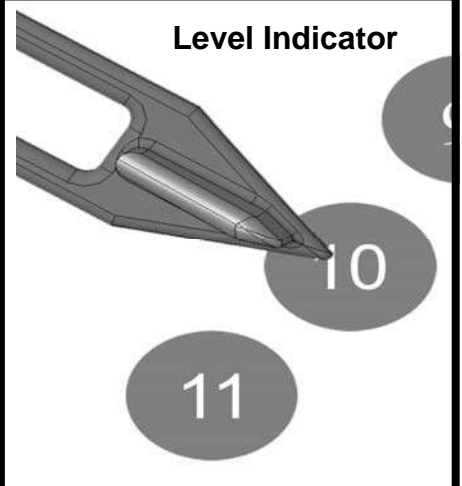
The VX-3 can easily be stored in a vertical position. For safety, choose a suitable location, such as a corner of a room. It is recommended that something soft (such as carpet or a small towel) be placed under the rowing pulley of the unit to avoid chipping or floor damage. **Note:** Move with caution as the machine is heavy. Pick up from back and pull at 45 degree angle.

Heel Support Adjuster:

The VX-3 has a unique and easy to use Heel Plate Support system. Simply slide the Heel Plate up or down and allow the teeth to lock it into place. This should be adjusted to place the ball of your foot directly under each horizontal foot strap. Tighten to secure before rowing.

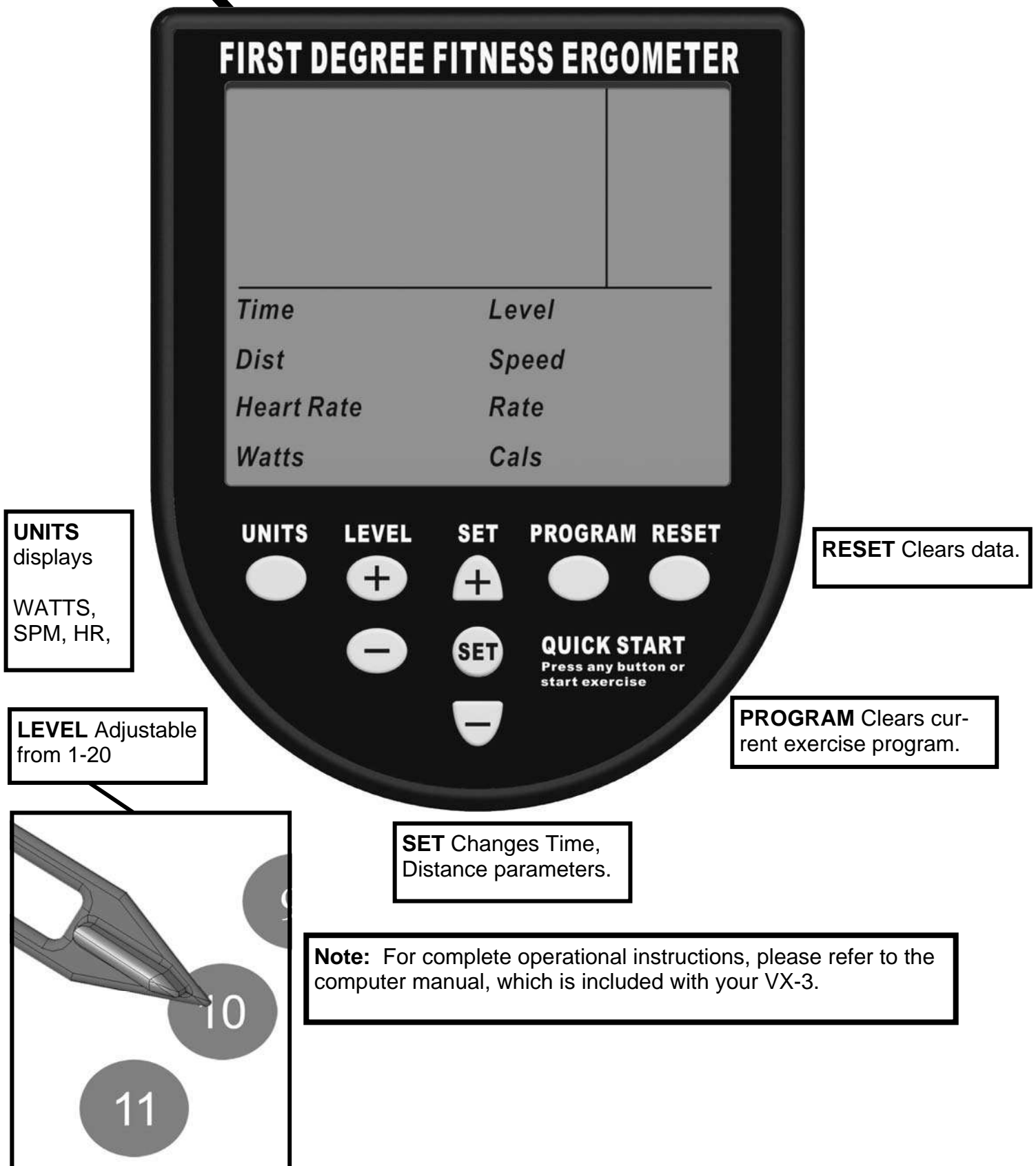
Resistance:

Resistance is determined by the Level Indicator on the front of the tank. Level 1 indicates lightest resistance and level twenty the heaviest. Allow three to four strokes, after moving the level indicator, for the new level to be achieved. Note computer level must be changed to provide accurate input at each individual tank level. Consult your IPM computer manual (included) for details.



VX-3 Rower Ergometer.

Quick start provides instant workout information. Just start training to activate. You can choose to change UNITS displayed.



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

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.

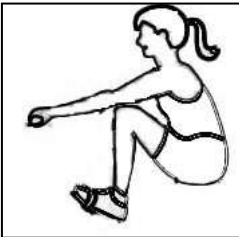
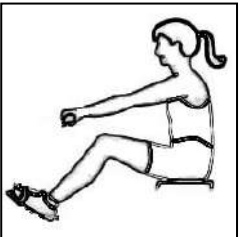
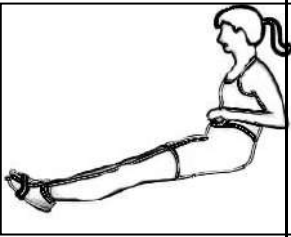
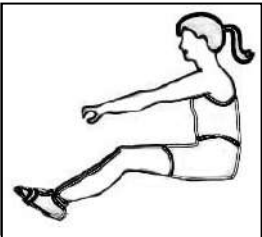
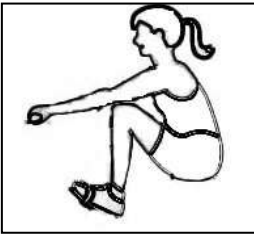
Progress a few minutes more each day until you are comfortable with 30-45 minutes training time 3 or 4 times a week.

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



CAUTION

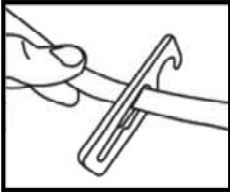

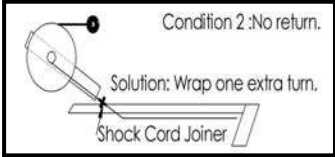
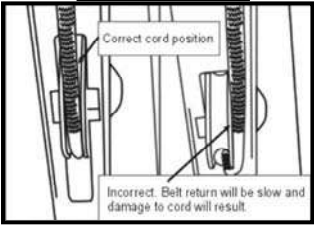
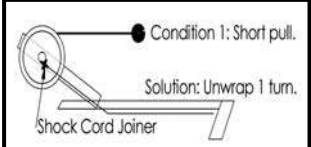
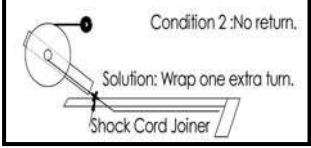
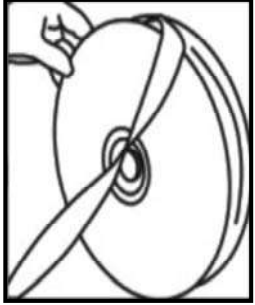
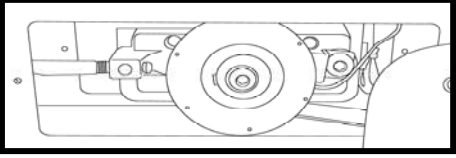
Always consult a doctor before beginning an exercise program.
 Stop immediately if you feel faint or dizzy.

				
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.

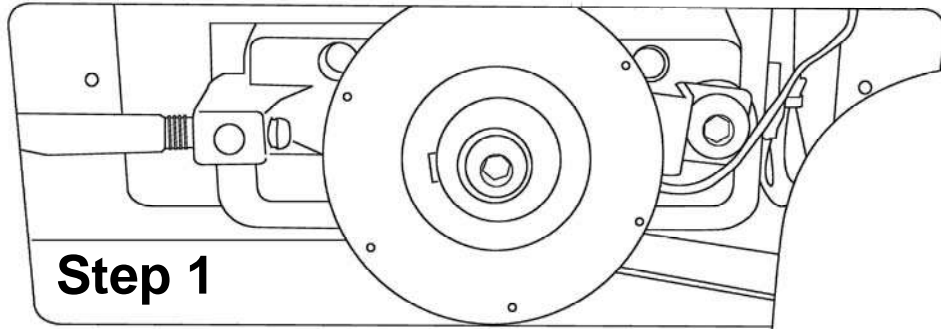
Maintenance Chart.

Item	Timeframe	Instructions	Notes
Seat and Seat Rails.	Weekly.	Wipe seat rails with a clean, dry cloth. Lightly spray the inside of rails with silicone spray.	
Frame.	Weekly.	Wipe down with lint free cloth.	
Tank and Water Treatment.	12 months to 2 years.	Follow instructions as specified in the “Water Treatment” section of this manual.	
Bungee Cord.	Check every hundred hours for correct tension and for signs of wear.	The Bungee Cord should last for many years. If a bungee cord change is required, please follow the instructions provided in the “Changing the Bungee Cord” section of this manual.	
Rowing Belt.	Check every hundred hours for correct tension and for signs of wear.	The Rowing Belt should provide many years of trouble free use. If a rowing belt change is required, please contact your local service representative or go online at www.firstdegreefitness.com for further details.	

Troubleshooting Guide

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 or change tank water as directed in the water treatment section of this manual.
Rowing stroke return is too light.	<p>Bungee not under enough tension.</p> <p>Rowing Belt missing one wrap around rower belt pulley.</p> <p>Bungee has slipped off the Bungee Pulley Wheel.</p>	<p>Cut Bungee Tie Rack and tighten slightly on Bungee Hook.</p>    
Computer screen illuminates, but does not register when rowing.	Loose or failed connection/Sensor gap too wide (see erratic computer display).	Check that the computer lead is connected properly. If connected properly check sensor gap. Contact your local service center if this fails to address the problem.
Rowing Belt cannot extend to the end of rowing stroke or no resistance.	Rowing Belt needs to be unwrapped 1 turn or, requires an extra wrap on the Rower Belt Pulley	  
The VX-3 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.
The VX-3 computer display is erratic while displaying SPM and 500meter times.	Gap between sensor and magnetic ring is too wide.	 <p>Remove large service cover and check gap between sensor and magnetic ring (should be no more than 2.5mm).</p>

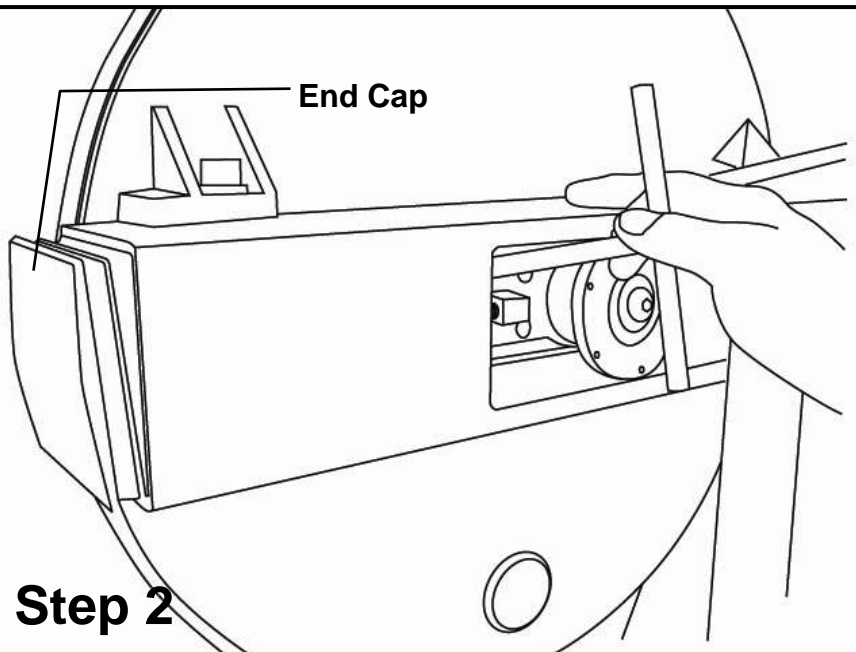
Tank Belt Adjustment



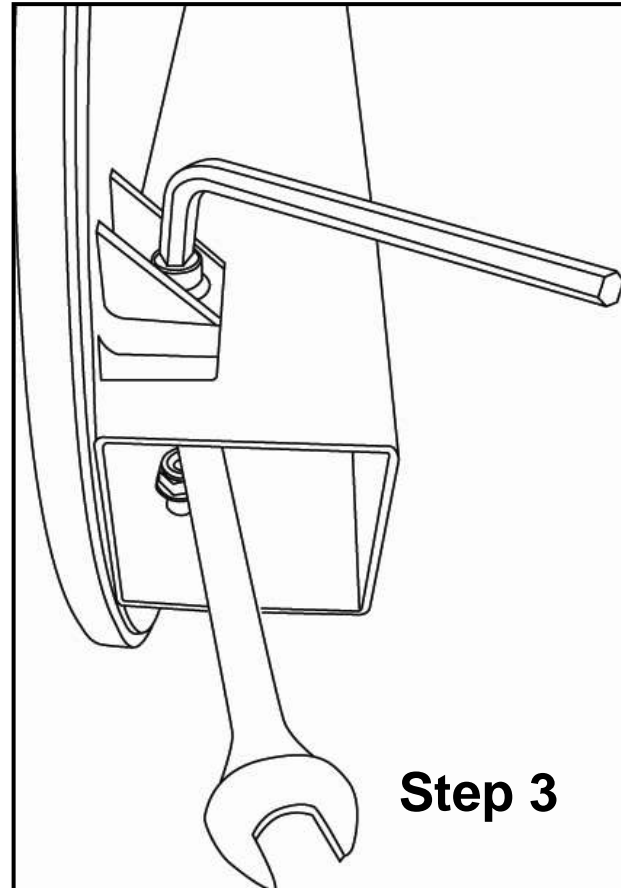
Step 1

Step 1: Remove large metal inspection plate as shown above.

Step 2: Using a long tool, push out the rear end cap as pictured below left. This will give you access to the tank tensioning bolt (shown lower right).



Step 2



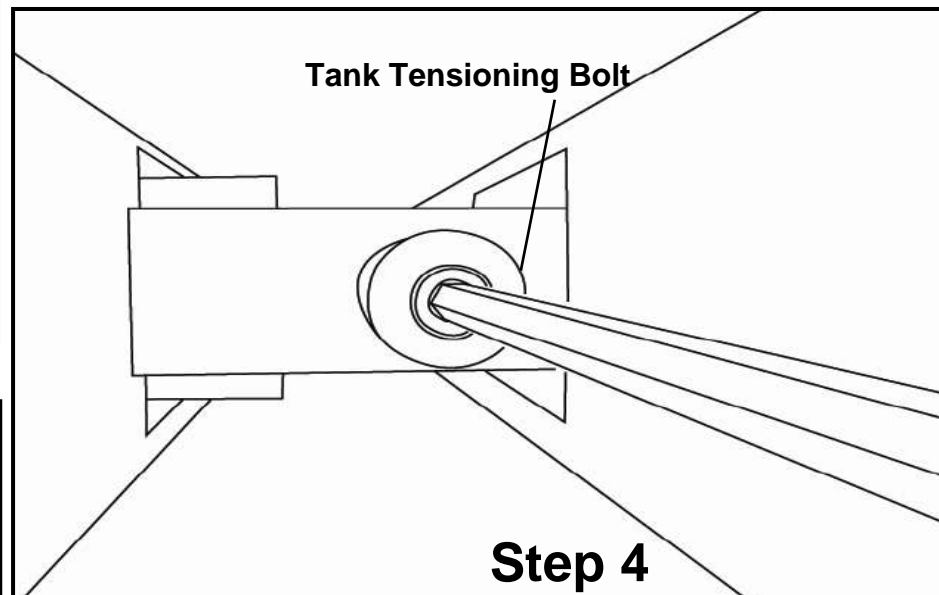
Step 3

Step 3: Loosen both the rear and front tank bolts slightly as shown left. Remove front Rubber Belt Cover.

Step 4: Using a 6mm Allen Key, tighten the Belt using the Tank Tensioning Bolt until the belt no longer slips during hard rowing.

Note: Do not over tighten tank bolts.

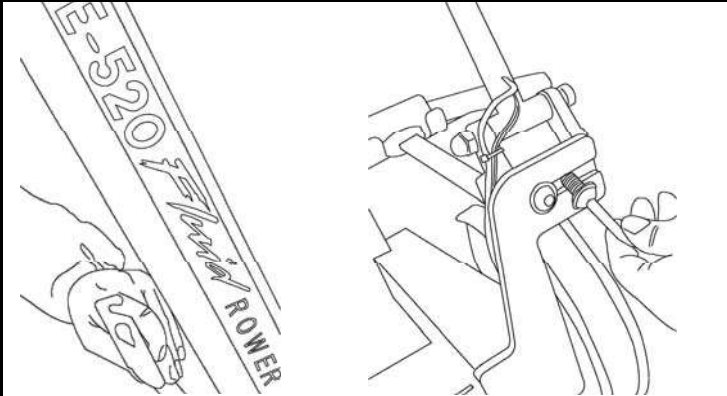
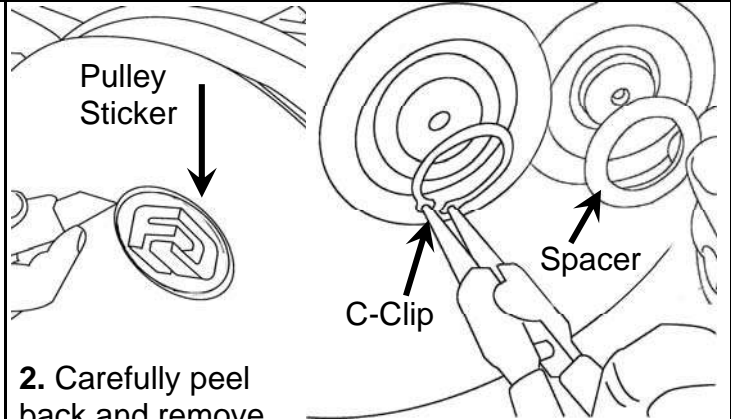
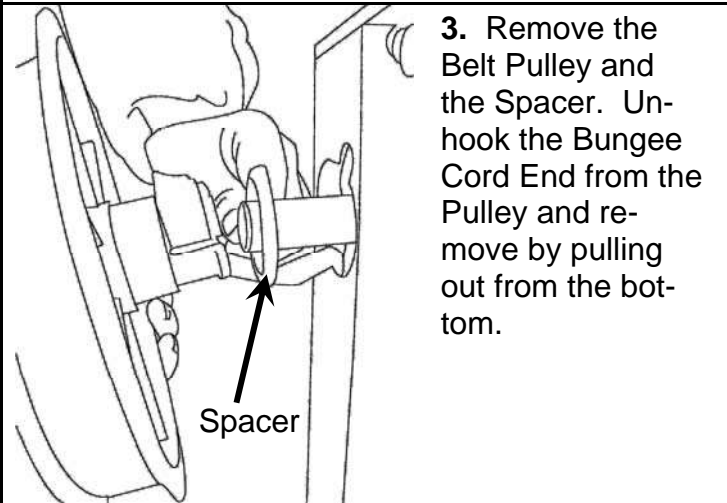
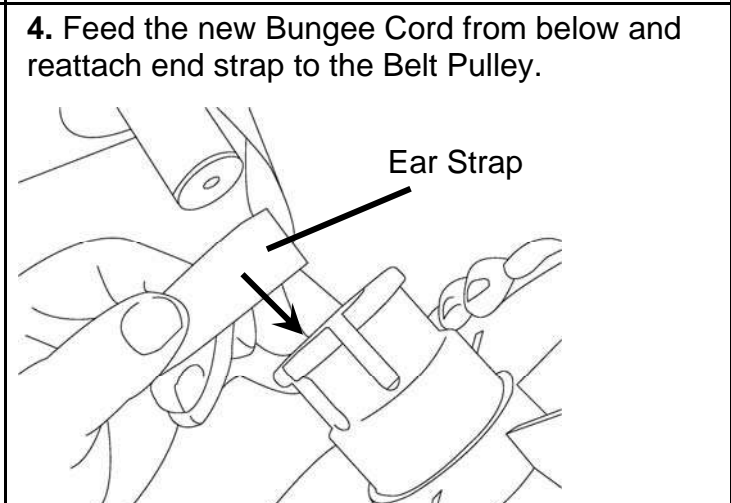
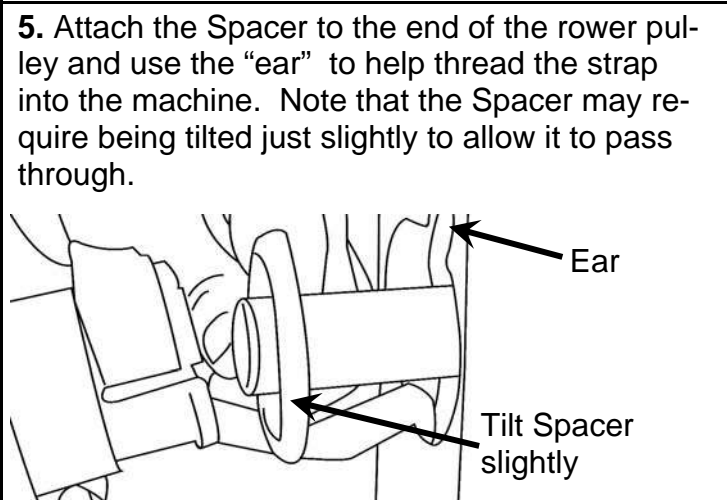
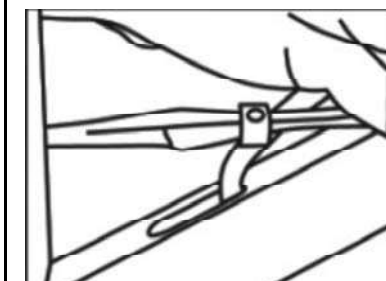
Tip: Twist the belt by hand to gauge tightness. Correct tension should be obtained when no longer able to twist more than 60 degrees.



Step 4

Bungee Cord Replacement. Dealer Assistance Required

(Expect 2-5 years bungee life in commercial use. Damage during initial rower assembly is not covered under warranty)

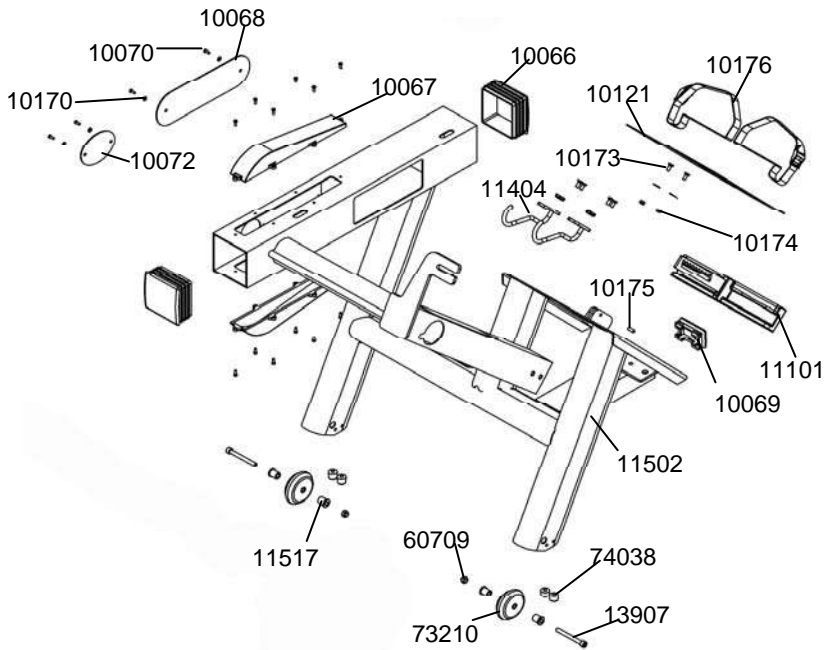
 <p>1. Unhook Bungee Cord Hook. Remove computer mount with 6mm Allen key.</p>	 <p>2. Carefully peel back and remove the Belt Pulley Sticker. Then remove C-Clip and Black Spacer as shown.</p>
 <p>3. Remove the Belt Pulley and the Spacer. Unhook the Bungee Cord End from the Pulley and remove by pulling out from the bottom.</p>	 <p>4. Feed the new Bungee Cord from below and reattach end strap to the Belt Pulley.</p>
 <p>5. Attach the Spacer to the end of the rowing pulley and use the "ear" to help thread the strap into the machine. Note that the Spacer may require being tilted just slightly to allow it to pass through.</p>	<p>Reattach the Bungee Hook to the end of the Seat Rail, install outer Spacer, C-Clip and Sticker. Test for proper installation. If the C-Clip cannot be reinstalled, then remove Pulley and try again as the Strap may be jammed.</p>  <p>The Joiner should be able to reach this position.</p>

Note: A light tap may be required if the black inner Spacer will not pass inside the frame.

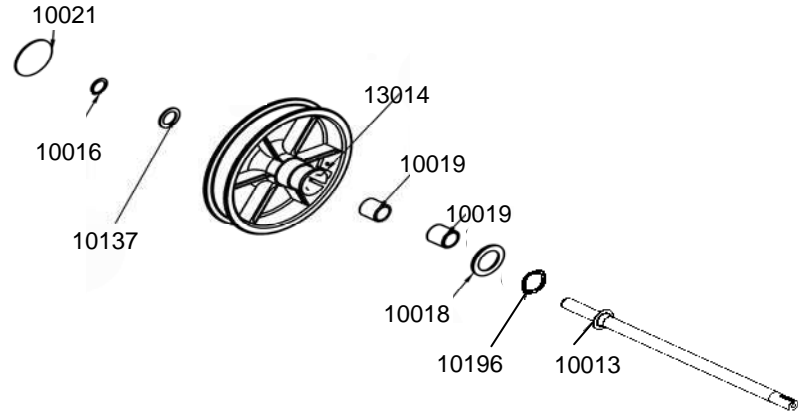
Reassemble. Note: A tight C-Clip mounting indicates the process should be repeated as the belt is jammed up.

VX-3 Main Frame Assembly

10066	2	End Cap 100x100mm
10067	2	Rubber Cover for Large PK Pulley
10068	1	Large Steel Side Cover 276mm
10069	1	End Cap 75x50mm
10070	16	Round Head Phillips Screw M4x10
10072	1	Small Steel Side Cover 100mm
10121	2	Non Slip for Rower Foot Plate 520
10170	4	Washer M4
10173	6	Counter Sunk Bolt M6x15
10174	2	Nylock Nut M6
10175	1	Heel Support Pin
10176	2	Foot Strap & Buckle #10177
11101	1	Heel Support
11404	2	Bar Catch - 520
11502	1	Main Frame—VX-3
11517	4	Spacer for VX-3 Transport Wheel
13907	2	Hex Head Bolt M8x75
60709	2	Nylock Nut M8
73210	2	Transport Wheel - VX-1/VX-2/216/316
74038	4	Rubber Bumper

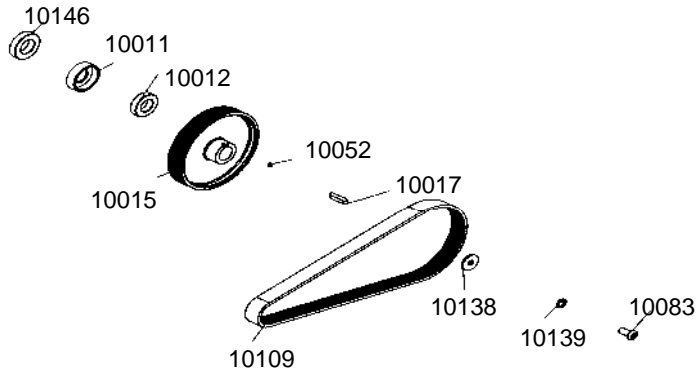


A085 Belt Pulley/Main Drive Assembly E520

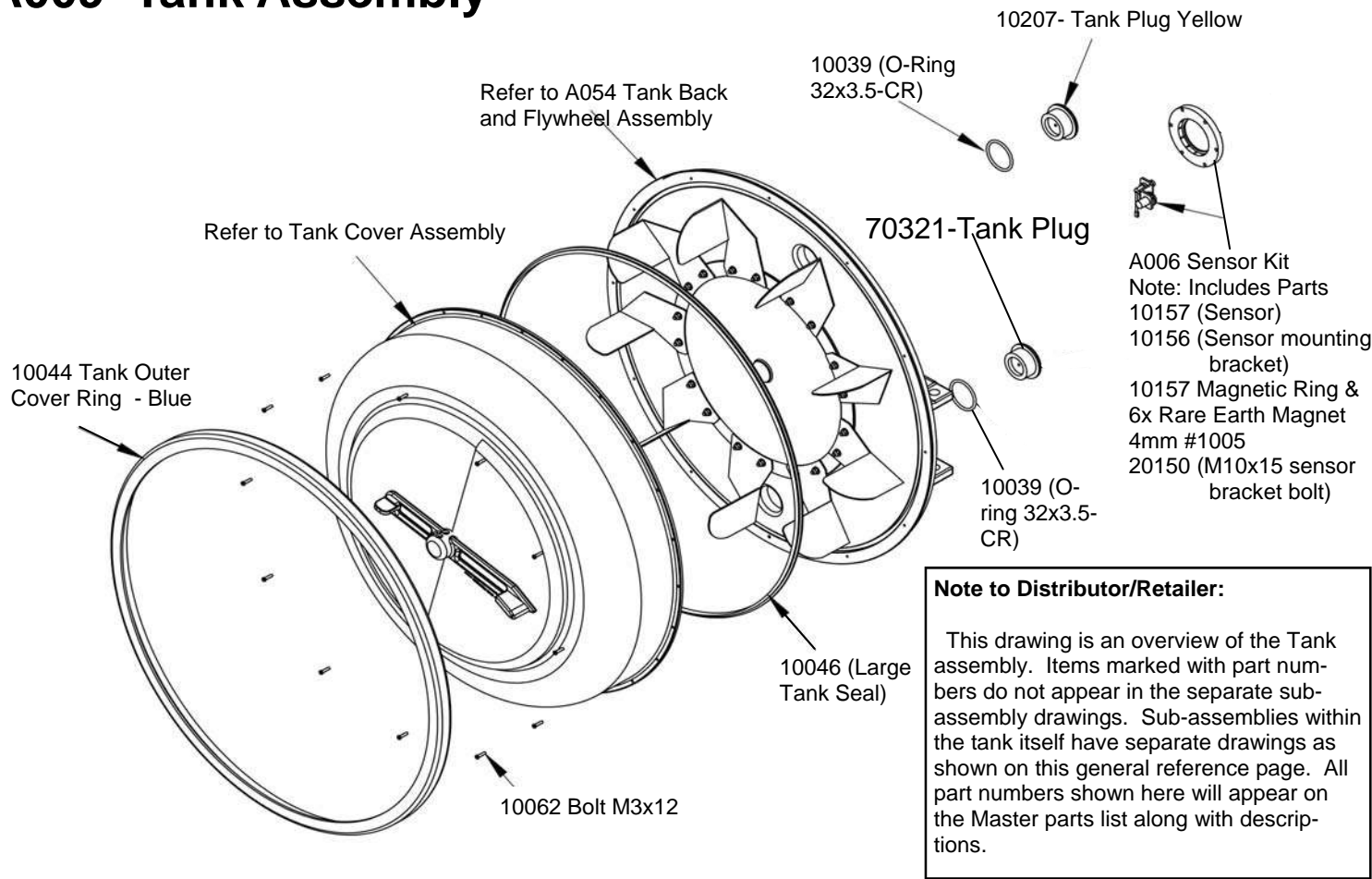


10011	1	Bearing Housing on Pulley Shaft
10012	1	Bearing NSK6005ZZ
10013	1	Main Pulley Shaft & Shaft Sleeve Bear-
10015	1	Large PK Transmission Pulley 150mm
10016	1	C Clip STW-25
10017	1	Key Way 7x7x32
10018	1	Nylon Pulley Spacer 60x40x6.5

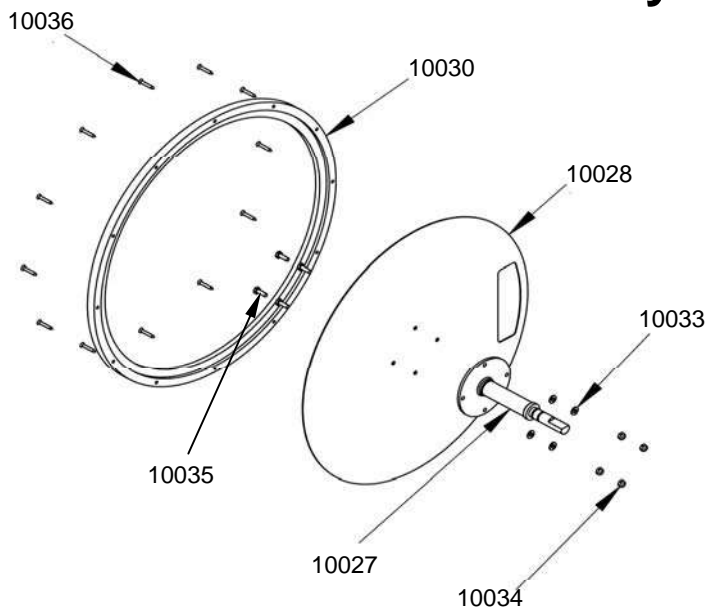
10021	1	Decal - Belt Pulley
10052	1	Grub Screw M4x6
10083	1	Dome Head Bolt M10x20
10109	1	PK Belt 7 Rib 926mm Hutchinson
10137	1	Belt Pulley Spacer 38*25.5*2t
10138	1	Washer 30x11.2x3t SUS
10139	1	Spring Washer M10 5.25x8.4x2
10146	1	Ball Bearing NSK6006ZZ
10196	1	Wave Washer M26
13014	1	Belt Pulley & 2 x INA One Way Bearings #10019



A009 Tank Assembly

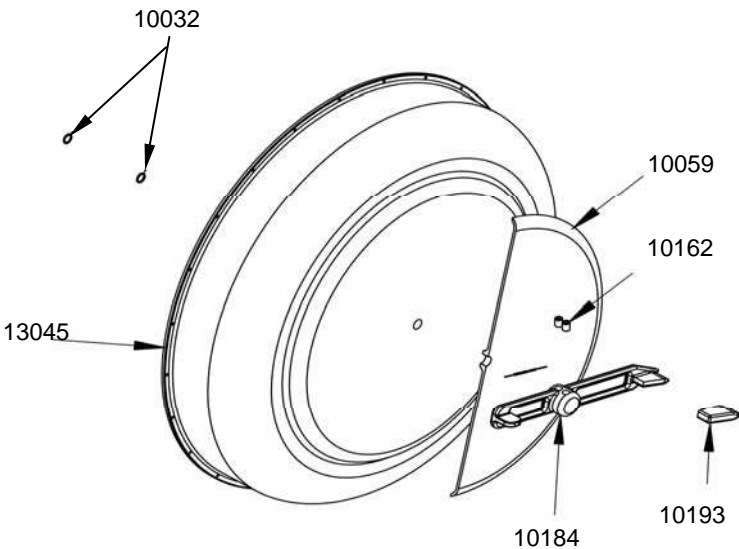


Tank Cover Assembly

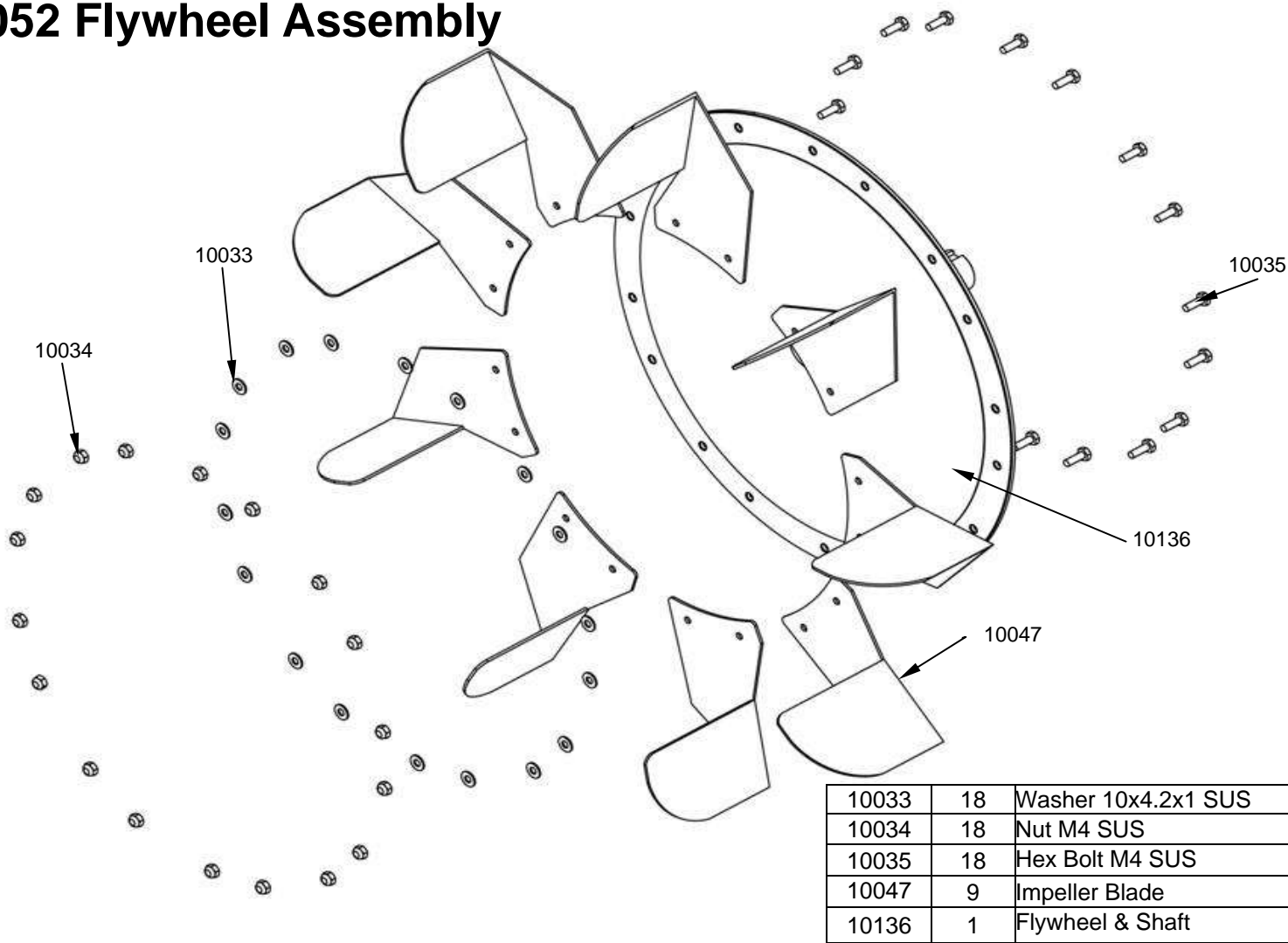


10027	1	Adjuster Handle Shaft
10028	1	Backing Plate 0.8mm SUS
10030	1	Adjuster PP Tank Ring 358x10
10032	2	Nylon Resistance Adjuster O Ring 12x9x1.5
10033	4	Washer 10x4.2x1 SUS
10034	4	Nut M4 SUS
10035	4	Hex Bolt M4 SUS

10036	12	Counter Sunk Tapping Screw M3x20 SUS
10162	2	Tapping Screws M8x10
10184	1	Adjuster Handle & PU Cover P/N 10193
13045	1	PC Tank Cover & Level Decal 20R - Blue

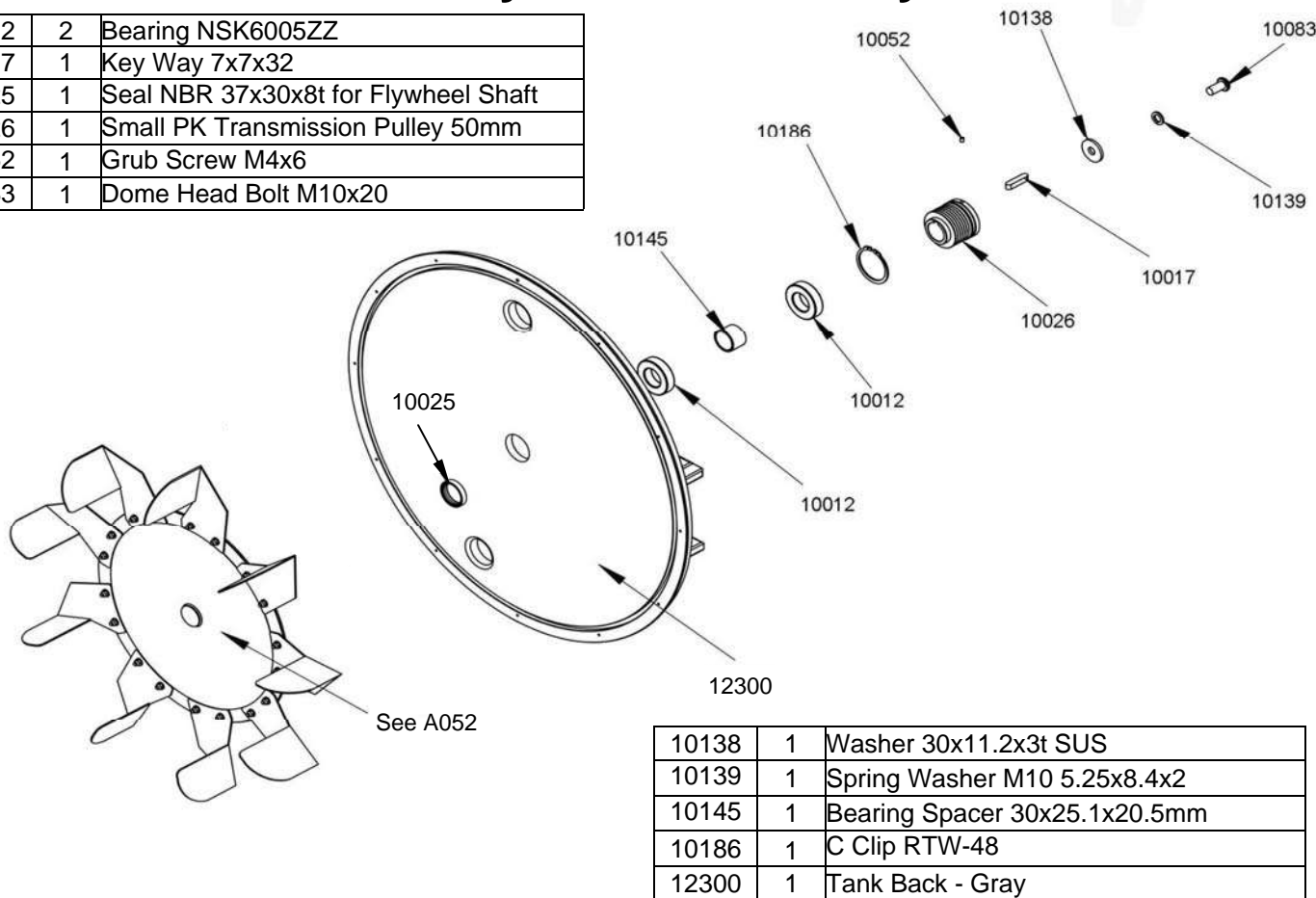


A052 Flywheel Assembly

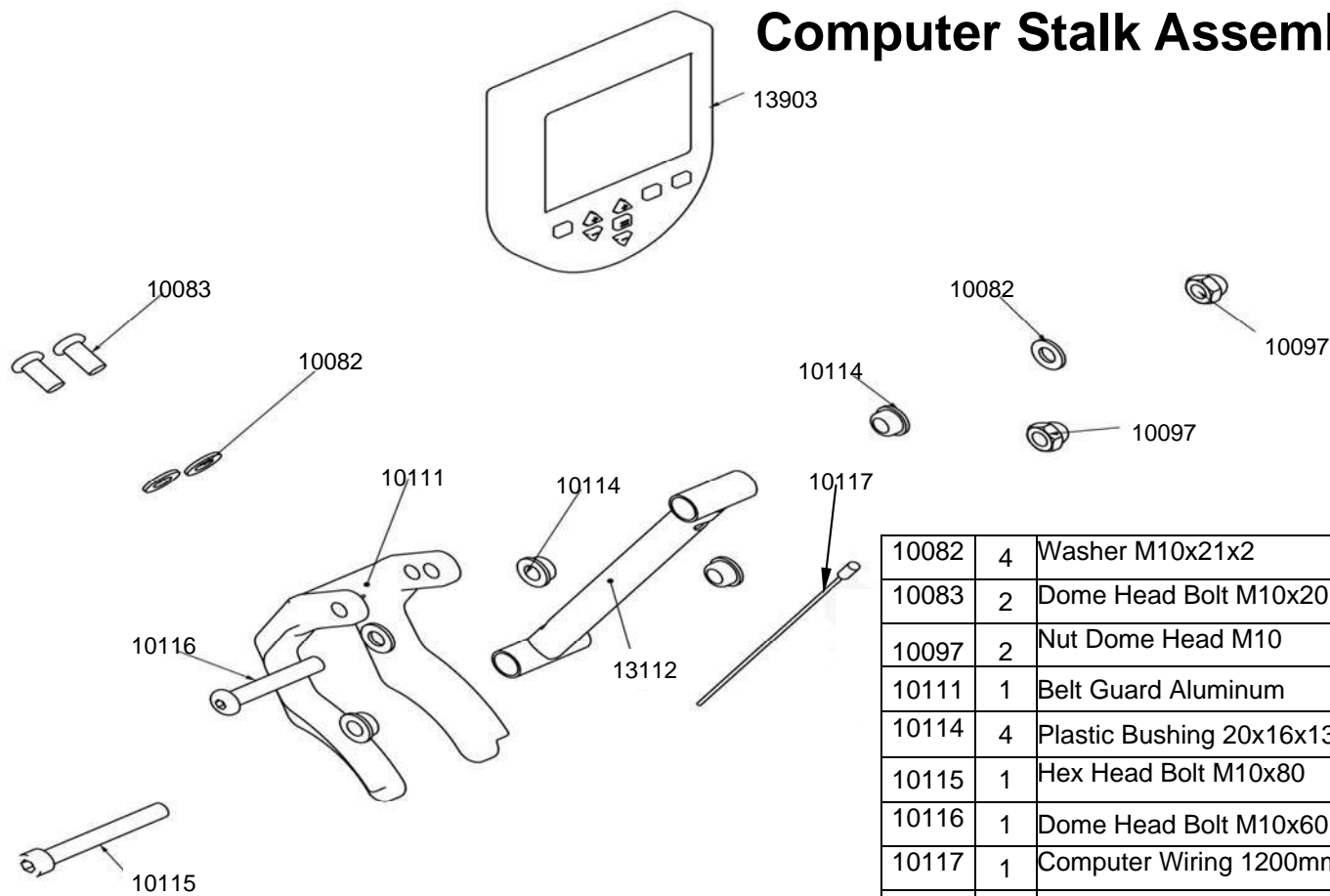


A054 Tank Back and Flywheel Assembly

10012	2	Bearing NSK6005ZZ
10017	1	Key Way 7x7x32
10025	1	Seal NBR 37x30x8t for Flywheel Shaft
10026	1	Small PK Transmission Pulley 50mm
10052	1	Grub Screw M4x6
10083	1	Dome Head Bolt M10x20

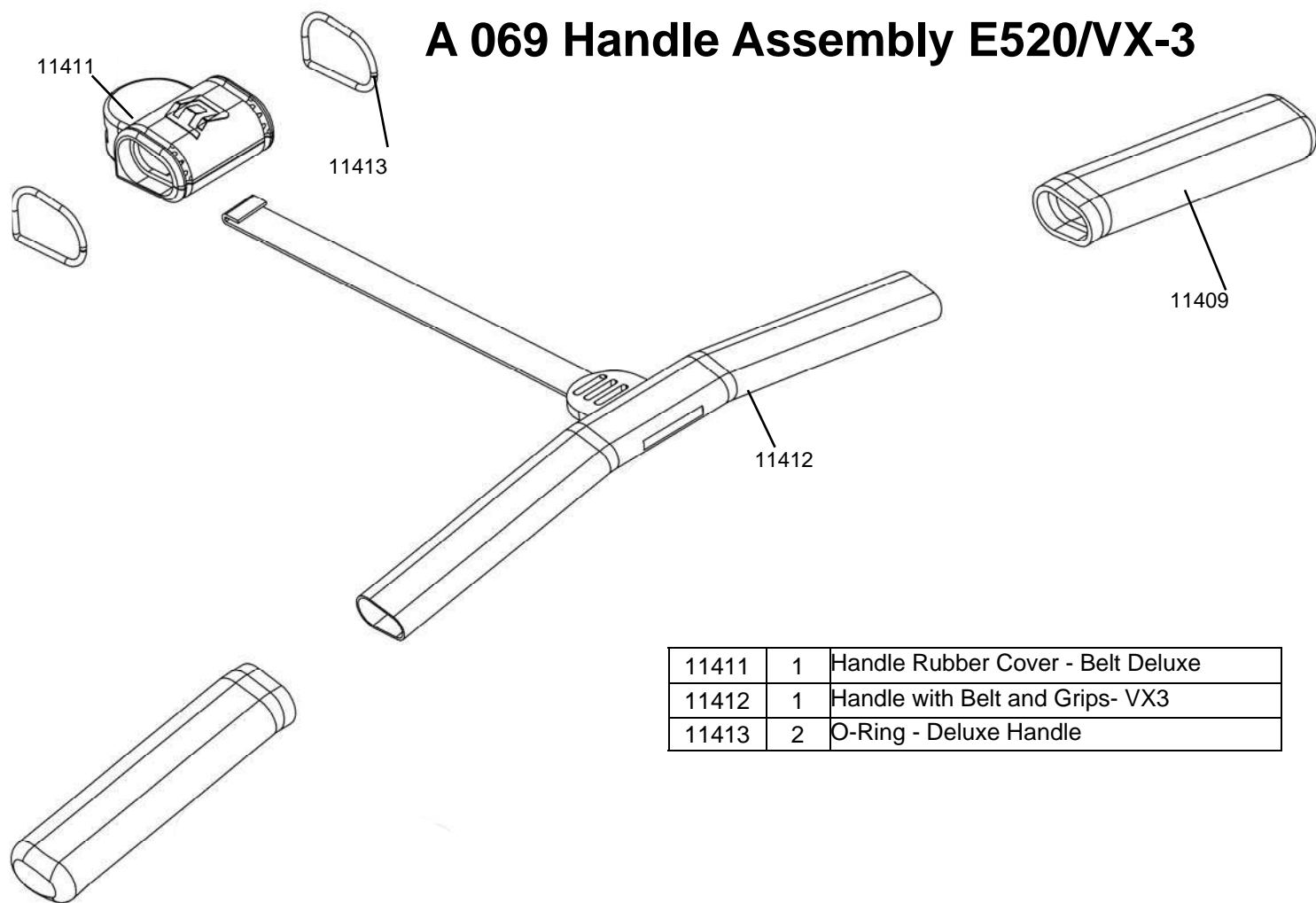


Computer Stalk Assembly



10082	4	Washer M10x21x2
10083	2	Dome Head Bolt M10x20
10097	2	Nut Dome Head M10
10111	1	Belt Guard Aluminum
10114	4	Plastic Bushing 20x16x13x10
10115	1	Hex Head Bolt M10x80
10116	1	Dome Head Bolt M10x60
10117	1	Computer Wiring 1200mm
13112	1	Computer Mounting Arm
13903	1	IPM with USB

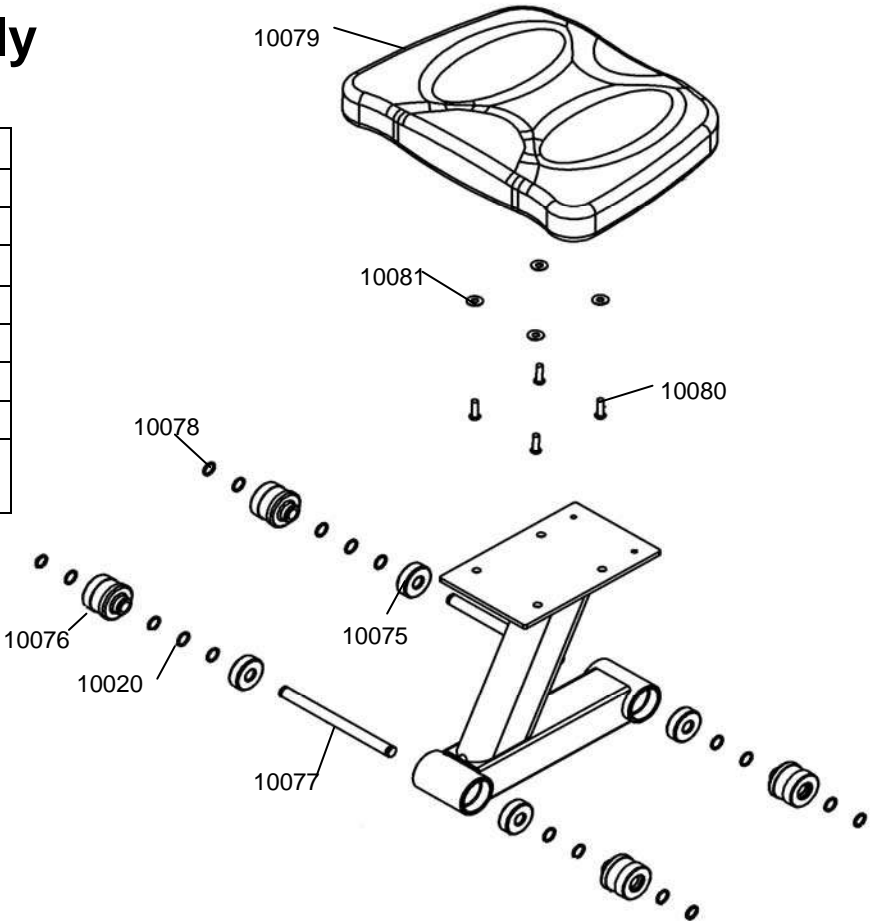
A 069 Handle Assembly E520/VX-3



11411	1	Handle Rubber Cover - Belt Deluxe
11412	1	Handle with Belt and Grips- VX3
11413	2	O-Ring - Deluxe Handle

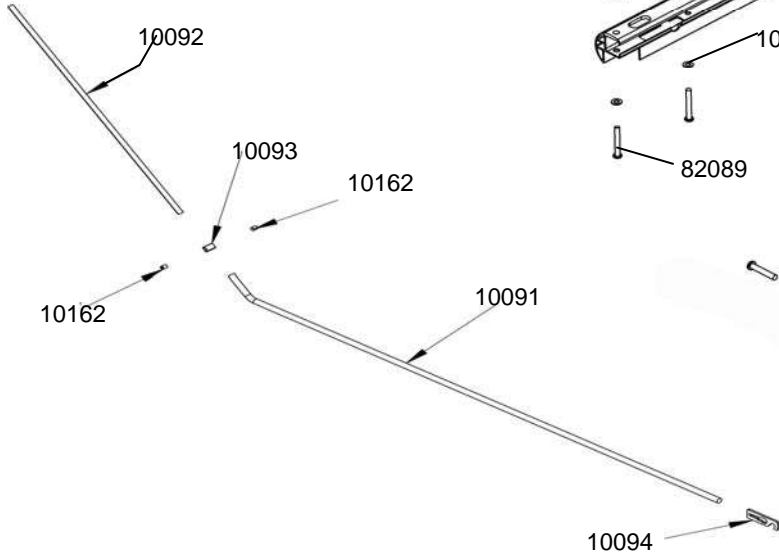
Complete Seat Assembly

10020	16	Seat Spacer 1x12.5x16
10076	4	Seat Wheel Polyurethane
10077	2	Axle Shaft 12x149
10078	4	C Clip ISTW-12
10079	1	Seat LS-E28
10080	4	Dome Head Bolt M6x20
10081	4	Washer M6x16x1
10101	1	Rubber Bumper TT500
10601	1	Seat Frame with 4x Bearing NBN 6301ZZ P/N 10075

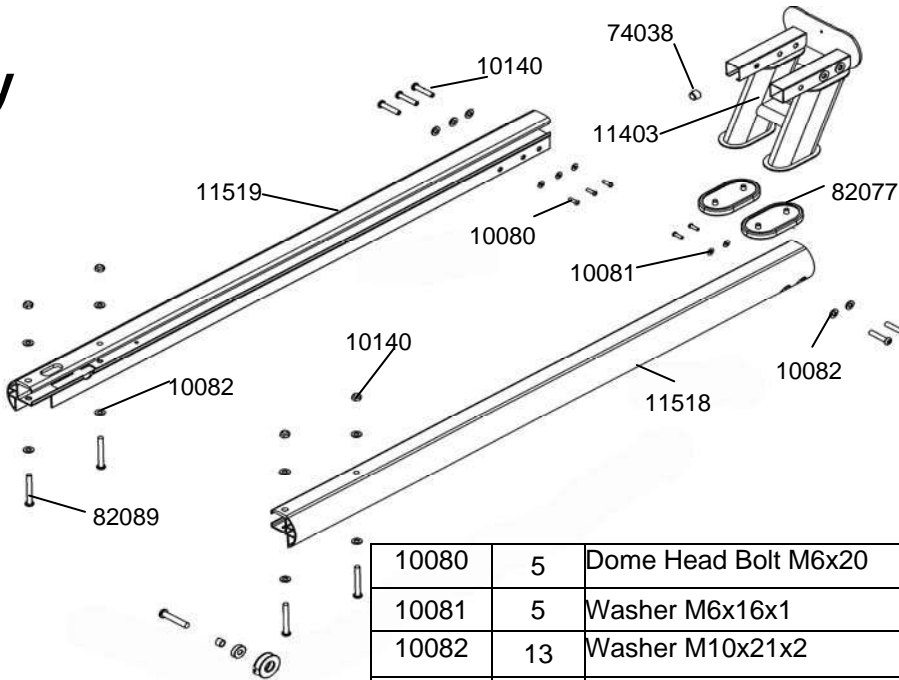


A003 Bungee Assembly

10091	1	Bungee 12mm
10092	1	Belt
10093	1	Shock Cord Joiner
10094	1	Bungee End Hook
10162	2	Tapping Screws M8x10



Note to Distributor/Retailer: The parts listed here are not sold separately.



10080	5	Dome Head Bolt M6x20
10081	5	Washer M6x16x1
10082	13	Washer M10x21x2
10140	5	Rear Leg Bolt M10x47.5mm
11403	1	Rear Leg VX3 with Oval Decal
11518	1	Rail Left - VX3 with Decals
11519	1	Rail Right - VX3 with Decals
13908	1	Dome Head Bolt M12x65
74038	1	Rubber Bumper
82077	2	Rubber Feet for Rear Leg - VX2/3
82089	4	Dome Head Bolt M10 x 80

Seat Rail and Rear Leg Assembly

VORTEX SERIES ROWERS

INTERNATIONAL WARRANTY – FULL COMMERCIAL USE

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

First Degree Fitness Limited warrants that the **Vortex Rower (model VX-1, VX-2 & VX-3)**, 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) – 2 Year Limited Warranty

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

Specific Inclusions

- Bungee recoil cord, belt and pulley
- Hand grips & foot straps
- Polyester rowing belt / Dyneema cable
- Seat
- All pulleys, rollers & bearings
- All rubber components
- Computer & speed sensor (excluding replaceable batteries)
- All drive belts
- Aluminum seat rails

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