

DYNAMIC ROWING MACHINE



USER MANUAL

Introduction

Thankyou for purchasing the Oartec DX.

Indoor rowing is one of the best overall fitness exercises for the body.

Dynamic indoor rowing makes it even better because you are achieving the same workout but without the wear and tear on the body, lower back and joints.

We are proud to be helping you achieve your fitness goals.

Please read the DX user manual carefully, following the procedures to assemble, set up and maintain you DX in optimal working condition.

Enjoy your rowing!

Dimensions

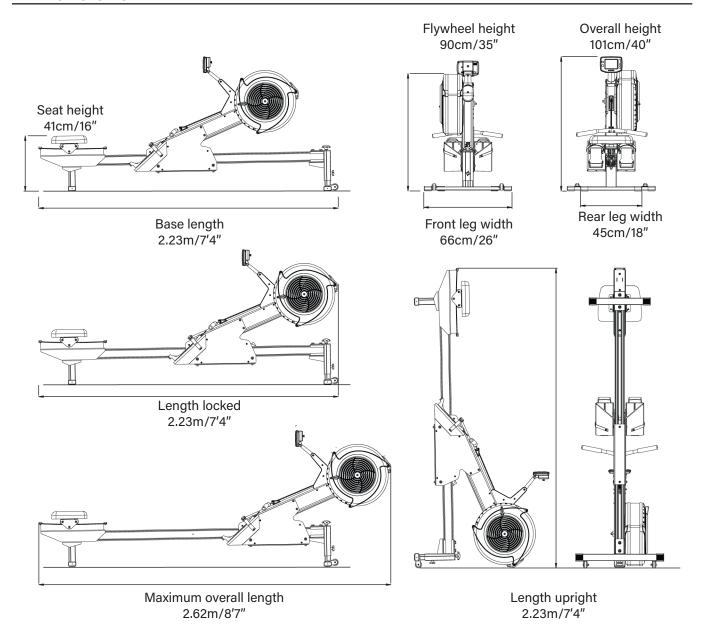


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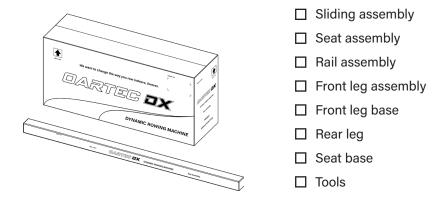
1. ASSEMBLY

Please follow the assembly procedures below.

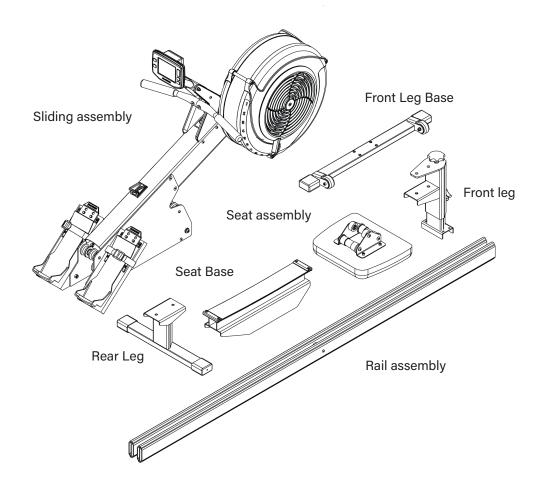
Assembly should take approximately 20 minutes and if possible get the help of a second person for the lifting.

Unpacking the Box

Carefully unpack the box contents and lay out on the floor. With the help of a second person remove the front assembly first. If assembling on a hard surface, use a drop sheet or blanket to protect the parts from damage during assembly. Check the contents of the box against the checklist below.



Box Contents



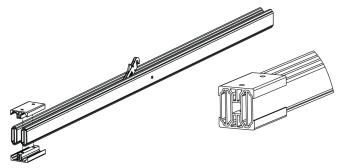
Step 1: Rear Leg and Seat Base to Rails

Tools required: 17mm wrench

1. Remove the rear extrusion mounts from the seat base bolts.

2. Attach the extrusion mounts to the top and bottom of the rear of the rail assembly. Make sure the locking latch is to the rear of centre.



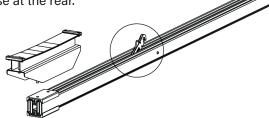


IMPORTANT

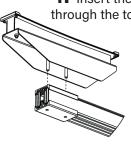
3. Check that the locking latch opens on the top rail edge. If it opens to the bottom, simply roll the rail assembly over to orientate correctly.



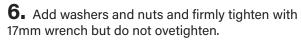
Check that the Seat Base is orientated correctly with the long angle of the base at the rear.

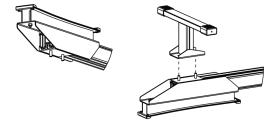


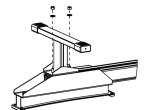
4. Insert the seat base bolts through the top extrusion mount.



5. Carefully roll the assembly over and rest on floor. Attach the rear leg to the seat base bolts.









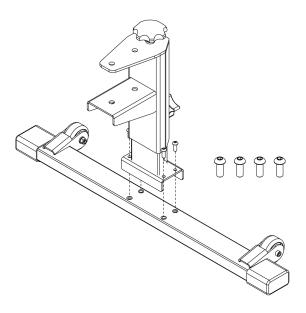
7. Turn assembly over and rest on floor.

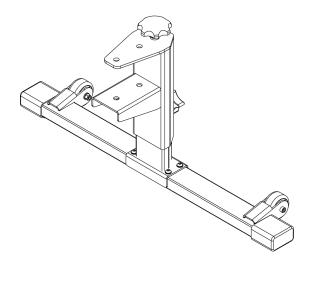


Step 2: Assemble Front Leg

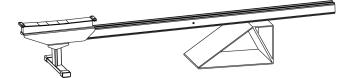
Tools required: 5mm allen key

- **1.** Thread the 4 bolts and spring washers to secure the front leg base tube to the front leg.
- **2.** Tighten with the 5mm allen key provided.

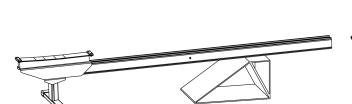




No tools required



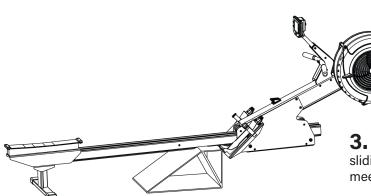
1. Place the rear support packaging on the floor. Rest the rail on the top of the seat box about ½ along the rail length toward the front. Check that it is stable before leaving.



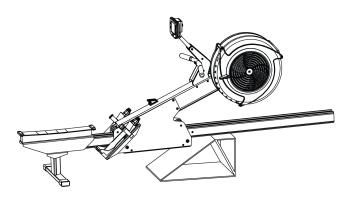
2. Carefully lift the sliding assembly and align the rail ends between the gap between the top and bottom rollers.

** If available, get the help of a second person.

Locate the sliding assembly onto the rails until the rails protrude through the other side.



3. While continuing to support the weight of the sliding assembly, slide the it down the rails until it meets the box.



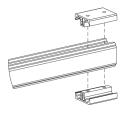
4. Lift the sliding assembly and rails over the box so the sliding assembly can continue down the rails and rest touching the seat base. Once clear of the box underneath, place the front of the rails back down onto the seat box.

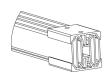
5. Check again that the rails and sliding assembly are balanced and stable before leaving.

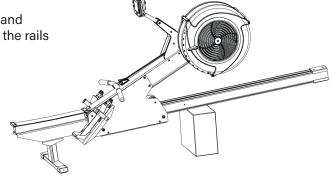
Step 4: Front Leg to Base Rails

Tools required: 16mm and 17mm wrench

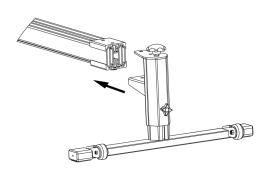
1. Align the front extrusion mounts to the top and bottom of the rails. Push the mounts tight onto the rails and level with the end of rails.



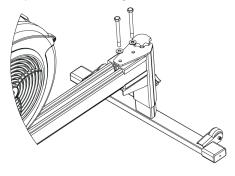




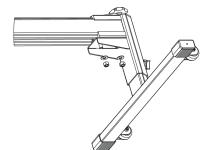
2. Slide the front leg bracket over the extrusion mounts and align bracket holes with the extrusion mount holes.



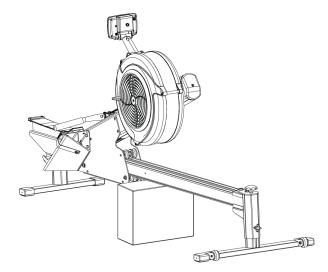
3. Place washers over the bracket holes and insert bolts through washers and the top and bottom extrusion mounts. Gently tap or shake the front leg to help the bolts through the holes.



4. Add washers and nuts to the underside bolts and tighten with the 16mm and 17mm spanners.



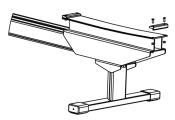
5. Remove the seat box from underneath the rails and place front leg on floor.

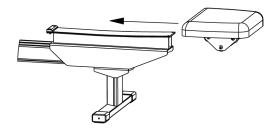


Step 5: Seat to Seat Base

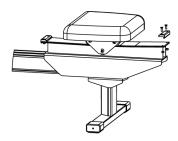
Tools required: 8mm wrench, Phillips head screwdriver

- **1.** Remove the rear end stop using the 8mm spanner and a phillips head screwdriver.
- **2.** Slide the seat onto the seat track.

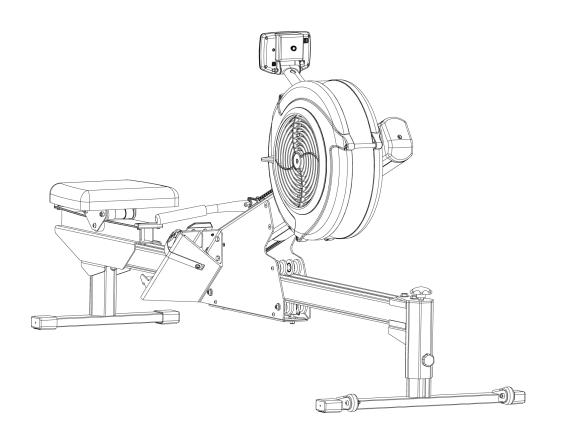




 $oldsymbol{3}_{ullet}$ Replace the rear end stop and tighten bolts.



Assembly Complete



2. Getting Started

Congratulations on completing the DX assembly process.

Please read the following final steps to set up before you use your DX for the first time.

Adjusting the Bottom Roller Wheels

The adjustment of the DX bottom roller wheels is preset during factory assembly. If the sliding unit is too loose or too tight on the rails it may be necessary to re adjust the roller wheels to their optimal setting before rowing for the first time. Follow the procedure set out in the **Maintenance** section of the manual to tune the bottom roller adjustment so that the sliding unit moves freely but stability along the rails.

Setting the Front Leg Height

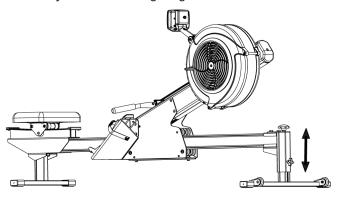
The DX rails are set to a 1 degree angle, sloping down from the front leg to the rear leg.

The front leg also has a height adjustable system that compensates for sloping and uneven floor surfaces.

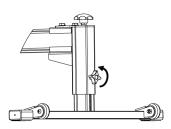
Try and find a flat even floor surface to use your DX. Row a few strokes to get used to the rowing movement first then check if you are rolling closer to the front or rear seat end stops.

If you consistently hit or go closer to one end of the seat stops, stop and adjust the front leg height higher or lower so that when you are rowing the seat has even travel in each direction.

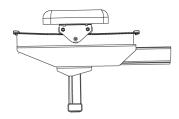
Follow the procedure below to correctly set the front leg height.



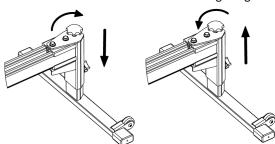
1. Loosen the locking knob at the lower front of the leg.



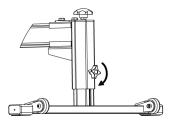
3. Check that the seat has even travel in both directions without hitting the end stops.



2. Turn the height adjuster knob clockwise to lower, or anticlowise for raise the front leg height..



4. Tighten the locking knob to lock height and stabilise front leg.

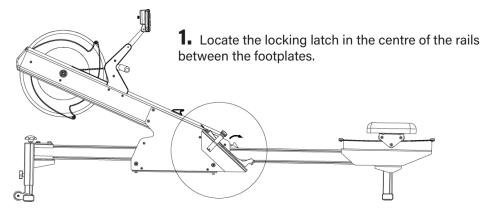


Locking the Sliding Unit

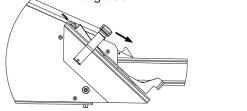
The sliding unit of the DX can be easily locked in place so that it can be moved around and stood upright to minimise space when not in use.

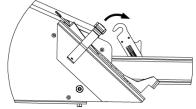
Follow the procedure below to securely lock the sliding unit in place before moving or standing the DX upright.

TIP: Lock the sliding unit every time before moving or lifting the DX.

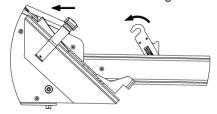


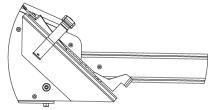
2. Press the spring lever down to release the locking latch from sliding unit and pivot the latch up about 45 degrees.





3. Hold the spring lever open and push the sliding unit forward to clear room for the latch to close down onto the holding axle in the centre of the rails.





4. Release the spring lever to secure the locking latch out of the way of the sliding unit..

WARNING

Make sure the locking latch is correctly locked to the sliding unit before moving or standing the DX upright. Do not try and row the DX while in the locked position as it may cause personal injury or damage to the machine. If you are aware of any faulty operation or damage to the locking latch or locking axles, please contact Oartec immediately for replacement.

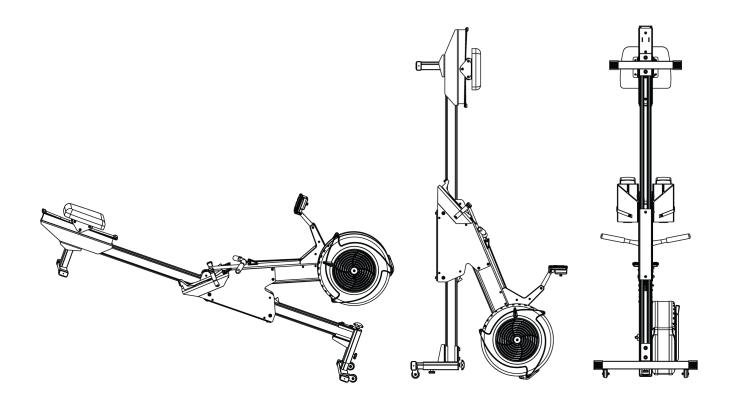
Failure due to damage or faulty operation of the locking latch whilst standing the DX upright may cause serious personal injury or damage to the machine and other property.

Storing the DX Upright

The DX can easily be moved around and stood upright to minimise the space required when not in use. To lock the sliding unit see *Locking the Sliding Unit* on previous page.

There are wheel located on the front leg to make it easy to manouevre the DX around and into a standing upright position. The DX stands on an even base between front end cap of the main body and leg wheels.

IMPORTANT: Always lock the sliding unit before moving or standing the DX upright.



WARNING

Make sure the locking latch is correctly locked to the frame before moving or standing the DX upright. Stand the DX upright only on flat even surfaces and away from other objects on the floor.

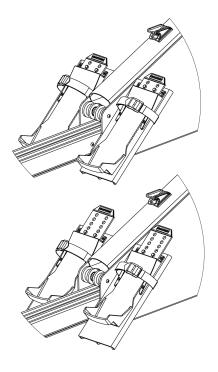
Be careful not to bump into the DX or push the DX over whilst stood upright as this may result in serious personal injury or damage to the machine and other property.

Do not unlock the locking latch while DX is stood upright as it may result in serious personal injury or damage to the machine and other property.

Always be aware of the instability of the DX in the upright position, and store in a location away from small children or pedestrian traffic.

Adjusting the Feet Height

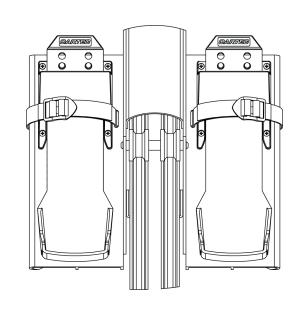
The footplate is fitted with a height adjustable footflex to set the feet at the most comfortable height for you. Set the feet height so that at the catch the top of your knees are just below your armpits.



Adjusting the Footstraps

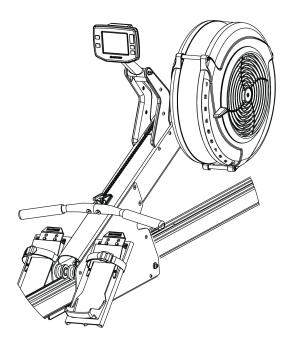
Tighten the footstraps by pulling the open strap away from the buckle across the direction of your foot.

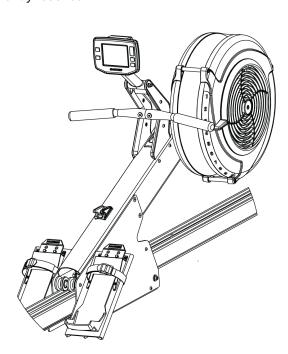
To release the strap, lift the buckle tab and pull towards the outside of your feet.



Storing the Handle

The handle can be stored in two positions, by using the handle holder closest or resting against the forward chain faring post. The handle holder position can be more conveniently reached.





Adjusting the Resistance

The DX uses an adjustable air resistance system to provide the resistance when rowing.

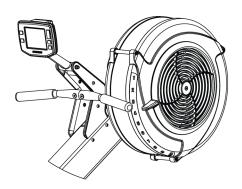
The resistance is adjusted by moving the air intake dial on the side of the flywheel housing.

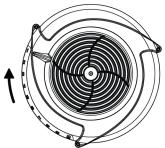
The resistance settings are numbered 1 - 10.

The lower the number the less air that can enter the housing, and the lighter the resistance.

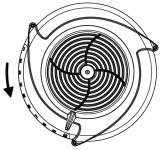
You can also set the resistance to a numerical Drag Factor by going to:

MENU - INFORMATION - DRAG FACTOR in the OTM-2.









Move the intake dial down to make resistance harder

Ready to Row

Thankyou for taking the time to read and complete the **Assembly** and **Getting Started** procedures for the DX.

If you experience any issues with your DX or have any further questions please contact your nearest Oartec office listed at www.oartec.com/contact

You are now ready to row the DX. We wish you many hours of rowing enjoyment ahead.

WARNING

Rowing is a strenuous physical exercise. Please consult your physician to be sure that it is not dangerous for you to undertake a strenuous exercise program.

Use of this machine with a worn, damaged or weakened components may result in injury to the user. When in doubt about the condition of any part, Oartec strongly advises that it be replaced immediately.

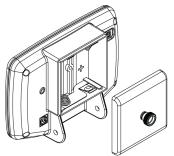
Follow the maintenance procedures to ensure optimal performance and prolonged lifetime of your DX.

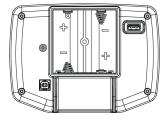
3. Oartec Training Monitor OTM-2

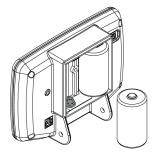
Please read the following procedures before using your OTM-2 for the first time. For more information and to download full user manual please visit www.oartec.com/otm-2

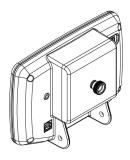
Installing the Batteries

The OTM-2 uses 2 x alkaline D cell batteries. Follow the simple process to install the batteries.









Loosen the knob that holds the battery cover. Remove battery cover.

Check the +/- orientation of the battery compartment.

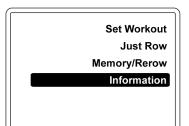
Install 2 x D cell batteries.

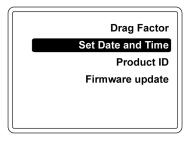
Replace battery cover

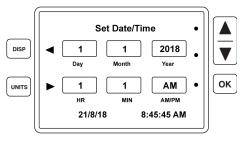
Setting Date and Time

Before you use the OTM for the first time, please ensure that the correct date and time are set. Once time and date are set it will remain current, even when replacing the main batteries as the OTM has a smaller back up battery to maintain the time and date setting from then on.

To set date and time follow the simple procedure below.



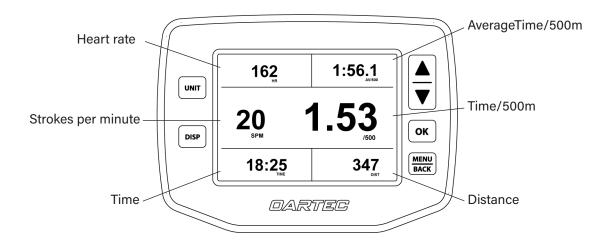




Press MENU button
ARROW to Information
Press OK

ARROW to Set Date and Time Press OK

Edit values using **ARROW** button. Press **UNITS** to select fields. Press **OK** to complete.



Turning the Monitor On/Off

The OTM turns on automatically once you start rowing.

To manually turn on press the MENU/BACK button.

The OTM will turn itself off after no activity for 3 minutes.

To manually turn the monitor off, press and hold the MENU/BACK for 3 seconds.

Main Menu/Navigation

To navigate through the Menu options, press the ARROW UP/DOWN button to scroll and the OK button to select further options. Press MENU/BACK to return a step or return to the Main Menu.

Screen Display Options

Press the UNITS button to change between Time/500m, Watts and Calories screens.

Press the DISP button to scroll through the display layout options.

Pairing ANT + Heart Rate

The OTM will automatically detect the closest available ANT + heart rate belt and display the value on the display screen top left hand field. The OTM has a detection range of about 8 – 12 ft/3 – 4 metres.

Firmware Updates

The OTM uses a USB stick to upload the latest system firmware and is a simple, user friendly process.

The latest firmware updates can be downloaded from the Oartec website www.oartec.com/otm-2.

Care and Maintenance

Always keep the OTM clean and dry and away from extreme temperatures, salt air and water.

Do not apply pressure to the display screen as this might cause it to crack or malfunction.

If necessary, gently wipe the display screen with a soft cloth after use.

Be careful to not let go of the handle at the end of a workout as this can cause unnecessary damage to the screen or monitor housing. When finished the workout always carefully place the handle back in the holder or rest against the chain post faring.

If the OTM won't be used for more than 1 month it is advised to remove the batteries to prevent any risk of damage due to corrosion or battery leakage.

Setting Up Workouts

Just Row

Just Row workouts are ideal for quick warm ups or for rowing as far as you feel like going.

Time and distance values both start from zero and count up as you row. With no set finish point, the workout ends when you stop rowing and the flywheel slows. Time and distance will stop at the last calculated value.

You can pause a workout for up to 3 minutes before the monitor automatically turns itself off. After a pause, you can recommence rowing and the distance and workout time will continue counting up again.

Just Row workouts however won't be recorded in the OTM workout memory.

Set Workouts

Time, distance or interval workouts can be quickly custom programmed or selected from preset lists. Set workouts count down the set time or distance and display the final results once completed. All set workouts are saved in the OTM memory.

eg. Set Custom Distance Workout

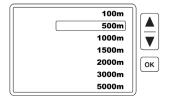
MENU - SET WORKOUT - DISTANCE - CREATE NEW - EDIT WORKOUT - READY TO START





eg. Select from List Distance Workout

MENU - SET WORKOUT - DISTANCE - SELECT FROM LIST - SELECT WORKOUT - READY TO START

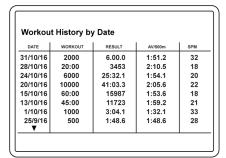




Memory/Rerow

Each completed workout is saved to the OTM memory. The most recent 50 workouts are stored in memory, with the oldest workout by date deleted for each new one added. The memory shows the workout summaries by date and the monthly totals. Select a workout to view more detail of the saved workout. In the view detail page, press OK to rerow the same time or distance.

Viewing Options



Total	stance: 200 Time: 6.00 v/500m: 1:30	.0		11/11/16 9:45am
SPLIT	SPLIT TIME	TIME	AV/500m	SPM
500	1:31.3	1:31.3	1:31.3	30
1000	1.31.1	3:02.4	1.31.1	32
1500	1.30.9	4.33.3	1.30.9	35
2000	1.26.7	6.00.0	1.26.7	31

Monthly Totals				
•				
SEPT	6:35:44	25,043m		
AUG	1:25:16	10,312m		
JUL	0:00:00	0m		
JUN	4:13:52	12,432m		
MAY	8:11:45	50,687m		
APR	12:35:24	93,472m		
MAR	3:25:49	15,025m		
FEB	7:35:26	30,542m		
JAN	8:55:31	60,255m		
DEC	3:45:53	12,058m		
NOV	5:25:23	42,021m		
OCT	7:55:41	58,587m		

Most Recent Workout Detail Monthly Totals

16

4. Maintenance

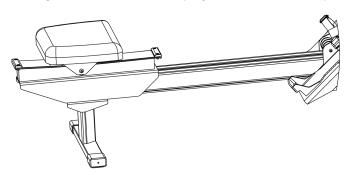
Please follow the procedures set out below to maintain your DX model in optimal working condition.

Cleaning the Rails

Frequency: Ideally after every use.

Tools required: Soft cloth, kitchen bench cleaner spray

Use a gentle kitchen cleaner spray and soft cloth to wipe down the rails of sweat, dirt and particles.

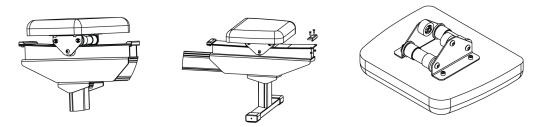


Cleaning the Seat Track and Seat Wheels

Frequency: Ideally after every use.

Tools required: Soft cloth, gentle kitchen cleaner

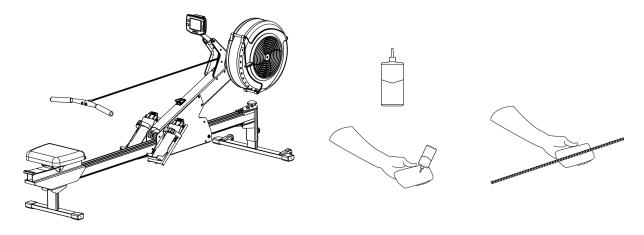
Use a gentle kitchen cleaner spray and soft cloth to wipe down the stainless seat track and seat wheels of sweat, dirt and particles. For a major clean ie. every 6 months, it is best to remove the seat completely.



Oiling the Chain

Frequency: After 50 hours of use or every 2 – 3 months. Higher frequency if DX is in a salt air or damp environment. Tools required: Soft cloth, 20w or 3 in 1 type oil.

Use a soft cloth and pour the oil into the cloth instead of onto the chain. Pull the handle to expose the chain and wipe a light coating of oil over the chain. Pay particular attention to the chain section that is exposed when not in use. While oiling check the length of the chain for any worn or damaged links.



Adjusting the Bottom Roller Wheels

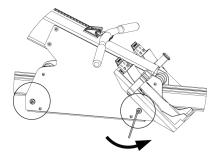
Frequency: As required - check adjustment regularly.

Tools required: 4mm & 5mm Allen Key, 13mm/16mm wrench

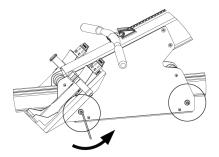
Check regularly the adjustment of the bottom roller wheels for optimal performance and prolonged life of the wheels and rail coating. The dynamic frame should be free to move back and forth quite easily. If the moving unit becomes loose, or wobbly then tuning the bottom roller adjustment is necessary.

Follow the steps outlined below to get the best perfomance from your DX.

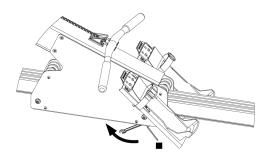
1. Using the 5mm allen key, loosen both front and rear wheel axle bolts on both sides of the sliding unit. Loosen bolts about a 1/2 to 3/4 turn.



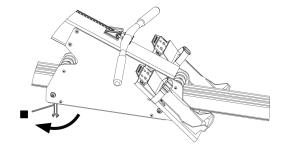
2. Locate the adjuster bolts protruding on the underside of the sliding unit. Insert the 4mm allen key into the socket of the rear adjuster bolt and while holding it steadily in position, use the 13mm end of the 13mm/16mm wrench to loosen locking nut in a **clockwise** direction about a 1/2 turn.

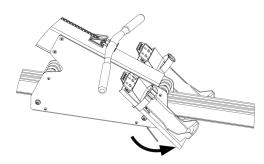


3. Repeat loosening procedure in Step 2 for the front roller adjuster.



4. Using just the 4mm key, loosen both front and rear rollers in an **anticlockwise** direction until the front assembly moves loosely along the rails.

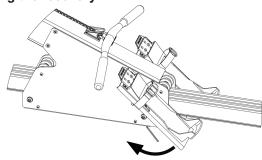




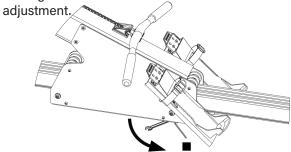
Adjusting the Bottom Roller Wheels

5. Start at the rear roller adjuster. Use the 4mm allen key to turn the adjuster bolt in a **clockwise** direction to tighten the rollers until they make firm contact with the rails.

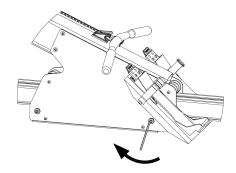
TIP: Do not over tighten the adjustment. The frame should roll freely without excessive friction. Overtightening will cause the rolling frame to be slow and require extra effort to return the machine during the recovery.



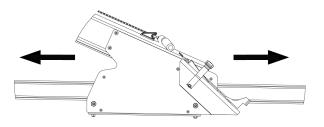
7. Lock the rear roller adjuster by inserting and holding the 4mm key in a steady position in the adjuster bolt from the underside of the sliding unit. If the adjuster bolt turns while tightening it will alter the adjustment. Using the 13mm wrench, tighten the locking nut in an **anticlockwise** direction to secure the



9. Test row the DX after adjustment and adjust the tuning again if necessary. Finally, tighten the axle side bolts on both sides of the sliding unit.

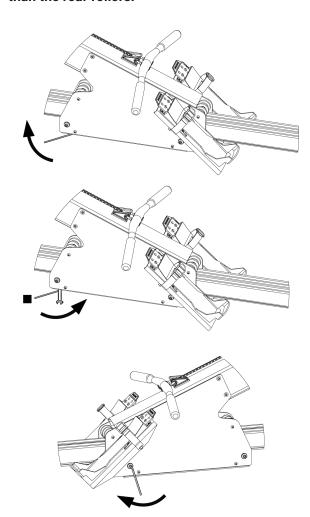


6. Test the movement of the front assembly along the rails. It should move freely along the rails but tight enough to have a stable connection to the rails. Make small adjustments to tighten or loosen the roller tension.



8. Repeat the same process in steps 5, 6 and 7 for the front rollers.

TIP: The front rollers can be adjusted slightly looser than the rear rollers.



Cleaning the Flywheel and Flywheel Housing

Frequency: After 100 hours of use or every 6-12 months.

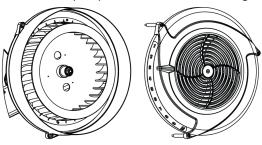
Tools required: 5mm Allen key, 16mm wrench

Dust can build up inside the flywheel housing and on the flywheel blades. While not a major problem, the dust will accumulate over time and can alter the resistance range, generally making each resistance setting lighter. Follow the process below to open the flywheel housing and remove the accumulation of dust and lint from the intake, the exhaust mesh and the flywheel blades.

1. Using just the 5mm key, loosen the 3 housing bolts.

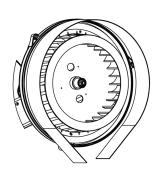


2. Remove the outer flywheel housing, while keeping the mesh strip in place in the inner housing.

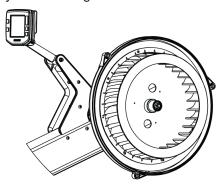


3. Release the mesh strip. WARNING: Careful to not let the mesh spring open which can cause injury or damage to the DX.

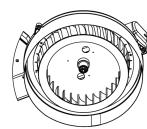
4. Using the 17mm wrench, undo the flywheel driveshaft nut and remove the flywheel.



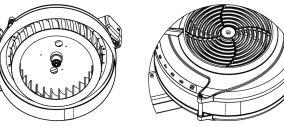
5. Clean flywheel, mesh strip, and the inner and outer housing of dust. Replace the flywheel and tighten driveshaft nut.



6 Insert the mesh strip into the slot in the inner housing overlapping the mesh at the bottom.



7. Replace outer cover and align overlap in mesh. Tighten bolts making sure the nut thread correctly onto the bolt before tightening.



5. DX Troubleshooting

If you are experiencing any issues with your DX, please check the troubleshooting list below. If unable to fix or determine the cause of the issue contact Oartec or go to www.oartec.com/dxserviceandsupport for all troubleshooting and servicing procedures.

Chain has jumped off drive sprocket

Remove chain guide

Align chain back and forward until it located back on sprocket

Chain is running roughly, slipping or jumping regularly off drive sprocket

Check condition of chain

Check condition of drive sprocket

Replace chain and/or drive sprocket if necessary

Chain becomes slow to return during recovery

Tighten bungee cord

Front assembly is loose or wobbles excessively side to side

Adjust and tighten bottom rollers

Front Assembly slow in rolling on rails

Clean build up of debris off roller wheels and/or rails Adjust and loosen bottom rollers

Range of resistance progressively becomes lighter

Clean flywheel housing and flywheel

Seat consistently hits front or back seat track end stops while rowing

Adjust front leg height.

Monitor not working - no display

Replace batteries - 2 x alkaline D cell

Check and clean battery compartment and terminals

Replaced Batteries - Monitor not working - no display

Check battery quality or use date - try another set

Contact Oartec for service or replacement under warranty

Monitor not working - numbers but no activity

Check sensor cable is plugged in

Sensor test sequence

Replace sensor cable if necessary

6. Warranty

The standard home use warranty term for the DX is 5 years on the frame and 2 years on parts.

This warranty is under the following terms and conditions:

I. Warranty

Frame

Oartec will replace or repair, at its option, the DX frame assembly or components that fail due to a defect in material or workmanship for a period of 5 years from the date of initial shipment.

DX frame assemblies or components are defined as the following:

Rails, Front Leg Assembly, Rear Leg Assembly, Seat Assembly, Rolling Frame Front Assembly

Parts

Oartec will replace or repair, at its option, the DX parts (including workout monitor) that fail due to a defect in material or workmanship for a period of 1 year from the date of initial shipment.

Replacement Frame Components or Parts

The replacement DX frame assembly and/or parts will be warranted for the remainder of the original warranty period.

II. Who is Protected

This warranty is given to the original purchaser and fully transferable to subsequent owners if transferred within the term of the warranty.

III. What is Not Covered

This warranty does not cover the following:

Any DX that has been modified or altered.

Damage, deterioration or malfunction resulting from:

- failure to follow the DX maintenance requirements as listed in the DX User Manual
- accident, abuse, misuse or neglect

Deterioration due to normal wear and tear

Damage to the finish of your DX model

Shipping costs and if applicable, customs clearance fees

Labour for installation of any parts shipped to you under warranty

IV. General

To the maximum extent permitted by law:

Oartec shall not, in any event, be liable for any incidental, indirect, special or consequential damages.

These warranties are in lieu of any other express or implied, including but not limited to, any warranty relating to merchantability or fitness for a particular purpose.

The duration of implied warranties is limited to the length of warranty specified in paragraph I above.

This warranty gives you specific legal rights. You may also have other rights granted under local laws of your state or country. These rights may vary in different countries.

V. Warranty Claims

To make a warranty claim, first please contact Oartec to inform us as to the nature of the problem.

Within USA and Canada please email info@oartec.com or telephone +1 360 322 4977.

For other countries please contact the Oartec distributor listed at www.oartec.com/contact

You will need to provide the serial number for your DX.

Send the defective assembly or part to Oartec Inc at 2657 Delta Ring Road, Ferndale, WA USA, 98248.

Return of the DX frame assemblies/parts to Oartec will be the responsibility of the claimant and must be

packaged to protect it from damage. Oartec will not be responsible for any damage which may occur during shipment.

More information contact Oartec at info@oartec.com or visit our website www.oartec.com