

This tutorial shows how to replace the chain on your XE-1.

If your chain has broken or fallen off, we recommend that you use the following instructions and steps for replacing a chain. If the chain is not damaged, it can be re-used instead of a replacement.

Recommended bike chain specifications:

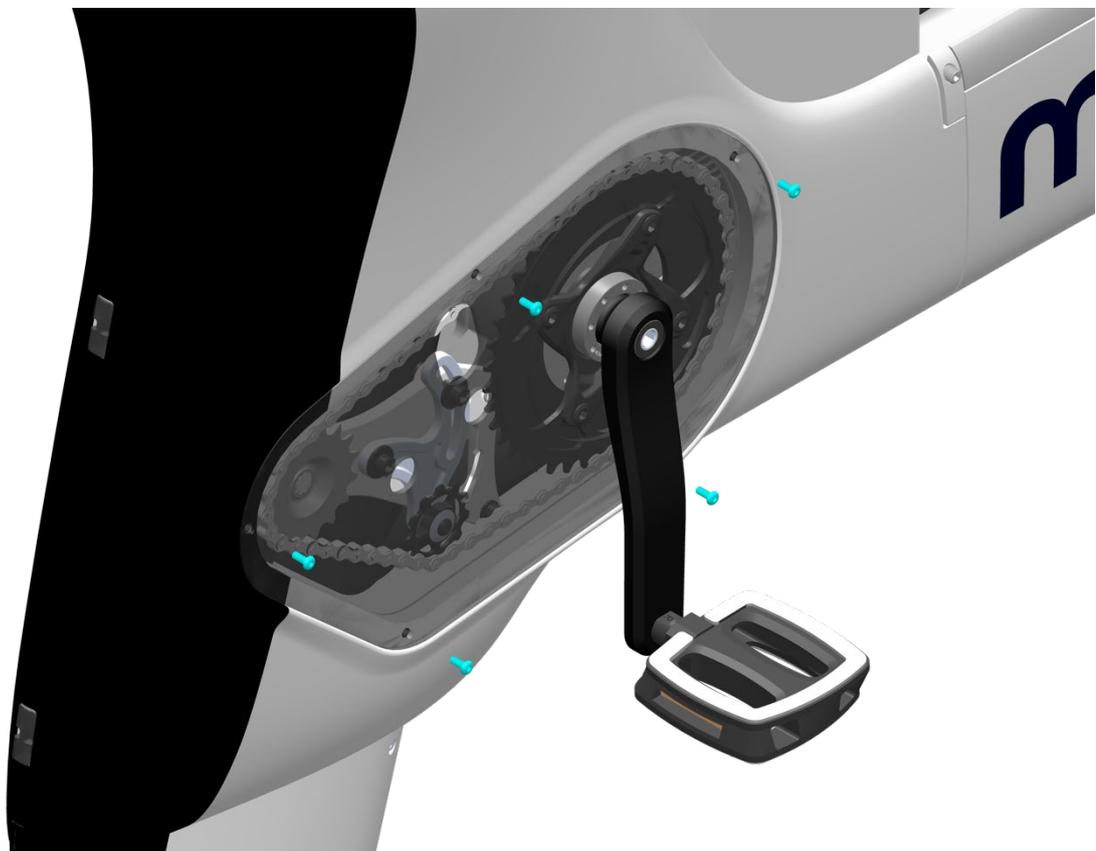
Standard Single Speed 1/2 inch x 1/8 inch , 64 Link Stainless Steel or Nickel Plated

1. Remove Chain Guard

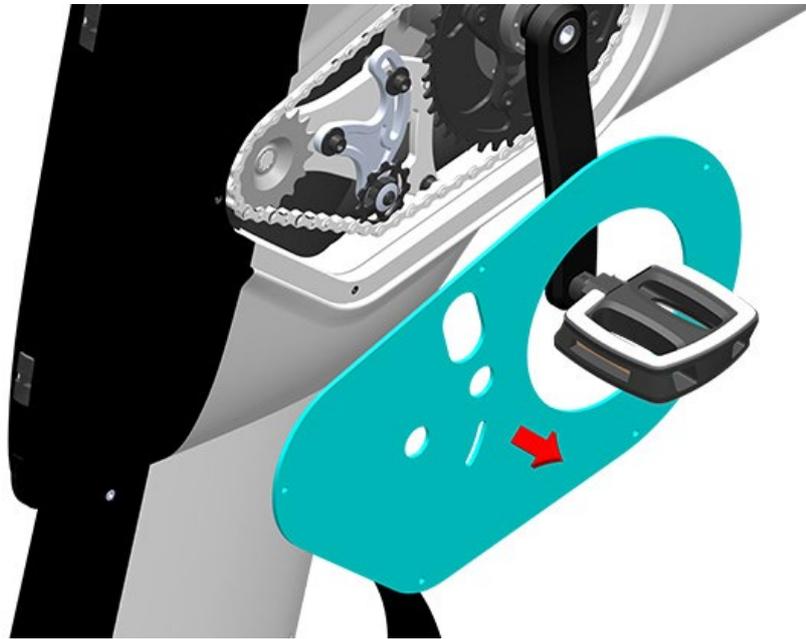
TOOLS REQUIRED

ID	Description	Task
	2.5 mm Hex Drive / Allen Key	Loosen 8 Gauge Machine Screws

1.1 Remove the five 8-Gauge Machine Screws that is used to attach the Chain Guard to the RH Rear Buoyancy. [Tools: 2.5 mm Hex Drive]



1.2 Remove the transparent acrylic Chain Guard over the RH Crank and Pedal.



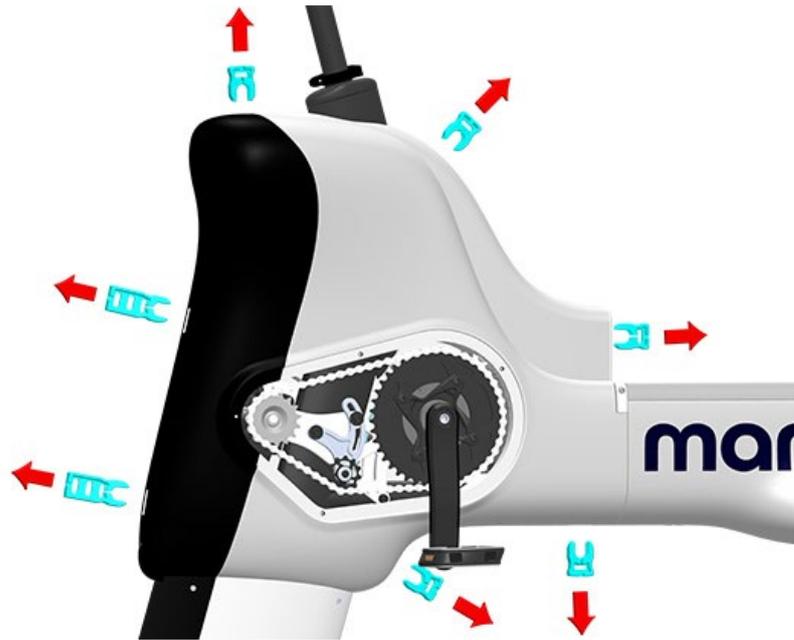
INFORMATION: Do not use solvents to clean the Chain Guard. Use warm soapy water (dishwashing liquid soap) instead.

2. Remove Rear RH Buoyancy (Crank Fitted)

TOOLS REQUIRED

ID	Description	Task
	Long Nose Pliers	Remove Buoyancy Clips

2.1 Remove all seven Buoyancy Clips. [Tools: Long Nose Pliers]



INFORMATION: Make a mental note of the positions where the Buoyancy Clips are removed. It is good practice to remove the white short Buoyancy Clip in front of the Seat Tube last.

2.2 With the crank approximately in the 6 O'clock position, remove the Rear RH Buoyancy module over the Crank and Pedal.



3. Remove the chain.

TOOLS REQUIRED

ID	Description	Task
	M5 Hex Key	Loosen M6 Cap Screws

3.1 Loosen the two M6 Cap screws securing the Chain Tensioner Bracket with Pulley (jockey wheel).

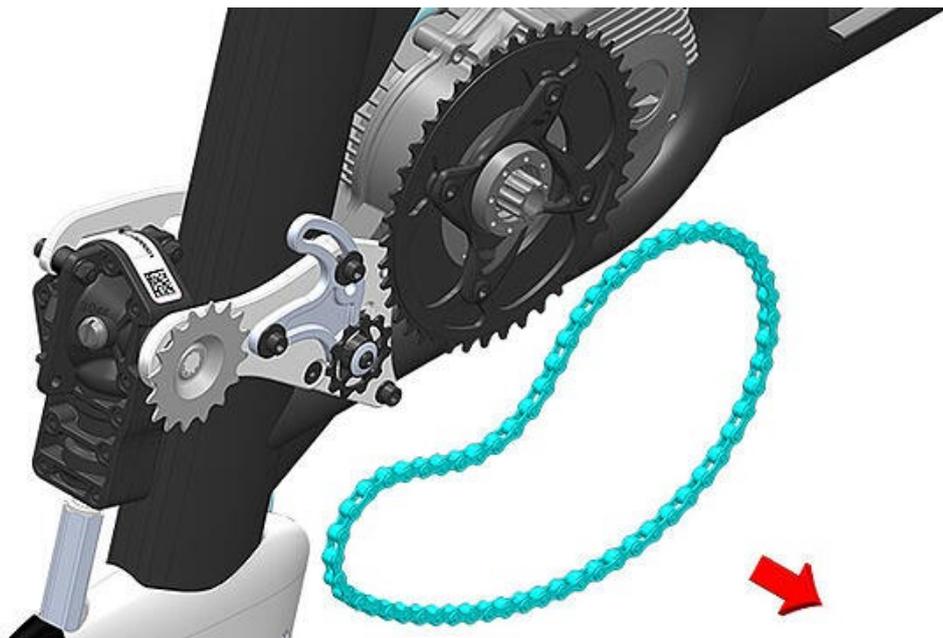


INFORMATION: For the purpose of removing the Chain, only loosen the screws by one or two turns sufficient to release Chain tension.

3.2 Push the Chain Tensioner Assembly upwards clear from the Chain.



3.3 Remove the Chain.



INFORMATION: The Chain is easily removed by derailing it from the Chainring by slowly rotating the Chainring gear while pushing the Chain to the side

4. Inspect the drive gear and chain tensioner for any damage.

5. Fit the replacement chain.

TOOLS REQUIRED

ID	Description	Task
	M5 Hex Key	Loosen M6 Cap Screws

5.1 Prepare to fit the chain by setting up the chain tensioner assembly by loosening the pivot point screw (highlighted red) and chain tension locking screw (highlighted green) so that the Chain Tensioner Assembly can be moved freely up and down.

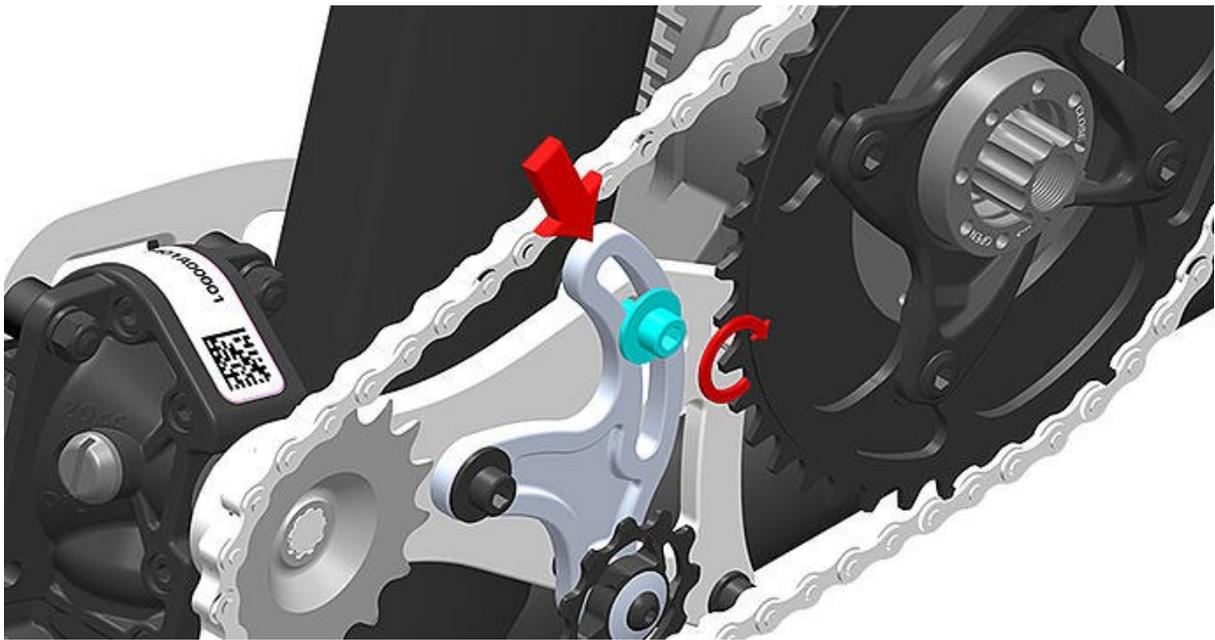


INFORMATION: The Chain Tensioner Assembly with Pulley (Jockey wheel) pivots around one screw serving as an axis (highlighted in red). The adjustment range is constrained by the slot and once adjusted the assembly is secured by firstly fastening the chain tension locking screw (highlighted in green) and finally the pivot screw. Do not use Loctite thread locker to the threads of the Chain Tensioner screws but use a lubricant like Tef-Gel (or equivalent) lubricant.

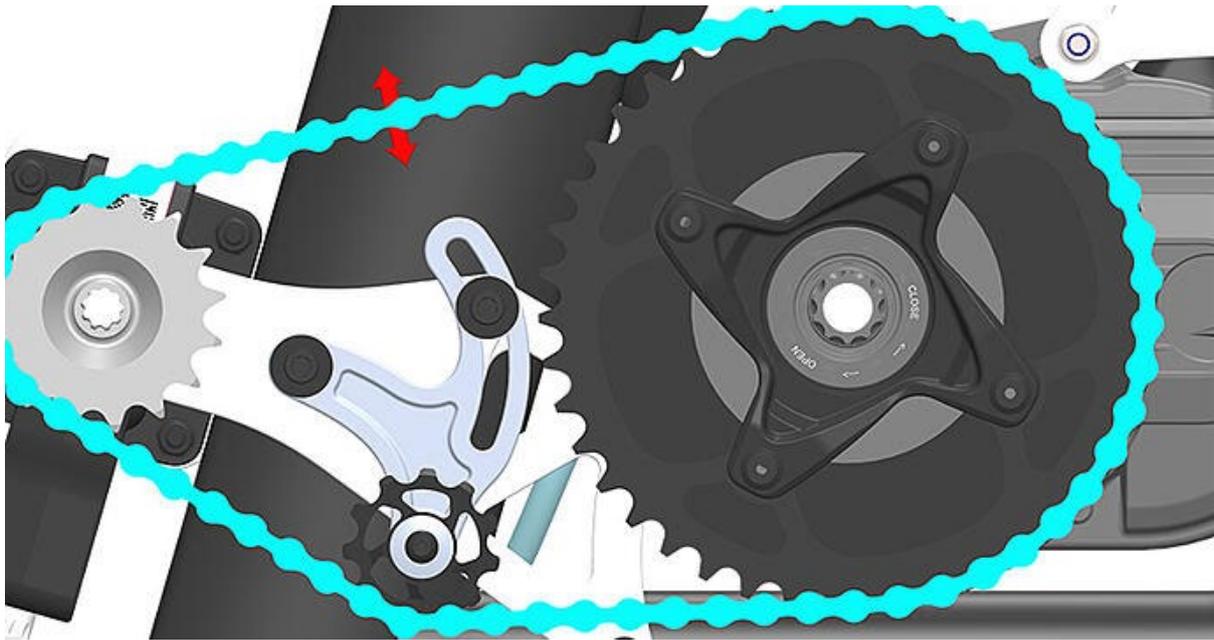
5.2 With the Chain Tensioner Assembly raised, fit the chain over the 16T Drive Gear Sprocket and 42T Chaining.



5.3 Apply light pressure (about 1kg of force) to the top of the Chain Tensioner Bracket and fasten the chain tension locking screw positioned in the slot at the same time.



5.4 Check Chain tension by moving the Chain up and down just above the Chain Tensioner Assembly in the centre of the span between Chainring and Drive Gear Sprocket. 8-10 mm of play is ideal.



INFORMATION: If Chain tension is too low, it is more likely that the Chain will fall off during use. With the Chain Tension too high the Pulley (jockey wheel) M5 Bolt may fail and the Jockey Wheel (pulley) to break off and drive to be lost. It is normal to observe slight variation in Chain tension as the Chainring gear is rotated. Rotate the Chainring gear through 360 degrees and ensure that the Chain is not excessively tight (< 8 mm of play) at any point

6. Fit Rear RH Buoyancy (Crank Fitted)

TOOLS REQUIRED

ID	Description	Task
	Long Nose Pliers	Fit Buoyancy Clips

6.1 With the Crank approximately in the 6 O'clock position, position the Rear RH Buoyancy Module by sliding it over the top of the RH Pedal and Crank.



INFORMATION: If the RH Cranks is fitted, the Chain Guard must be removed before fitting the Rear RH Buoyancy to the bike.

6.2 Align the Rear RH Buoyancy with the Frame and LH Buoyancy so that the Insert Locating Pins align with the mating inserts on the RH Buoyancy module.



6.3 Fit all seven Buoyancy Clips to secure both LH and RH Buoyancy halves to the hydrofoiler. [Tools: Long Nose Pliers]

