

REPLACE REAR BUOYANCY MODULE

Starting with a fully assembled XE-1, this work instruction will show you how to replace the Rear Buoyancy module.

To replace the Rear Buoyancy, check that you have the following tools available:

TOOLS REQUIRED

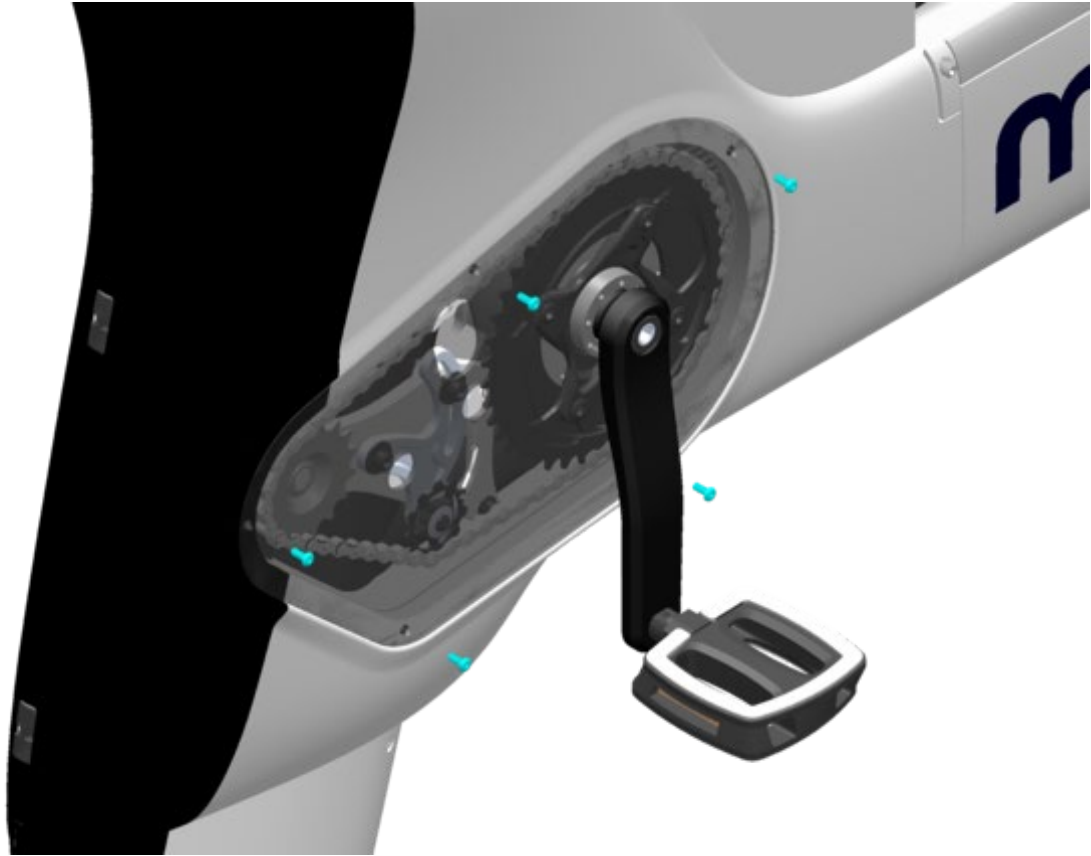
ID	Description	Task
N/A	2.5mm Hex Key (Allen Key)	Remove/Fit Chain Guard Screws
N/A	Long Nose Pliers	Remove/Fit Buoyancy Clips
N/A	Hex Key 8 mm (3/8" drive)	Remove/Fit Crank Bolts
N/A	Park Tool Crank Extractor - CCP44	Remove LH Crank
N/A	Torque Wrench (20 – 60 Nm) (3/8" drive)	Fasten Crank Bolts (50 Nm)
N/A	Rubber Mallet	Assemble Crank Arms to Motor Drive Shaft Spline

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.



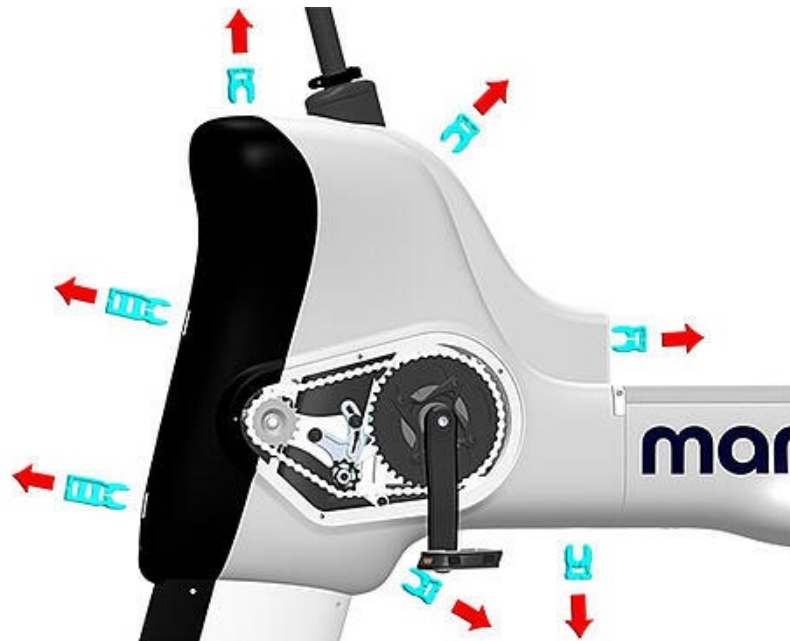
INFORMATION: Do not use solvents to clean the Chain Guard. Use warm soapy water (dishwashing liquid soap) instead.

2. Remove Rear RH Buoyancy (Crank Fitted)

TOOLS REQUIRED

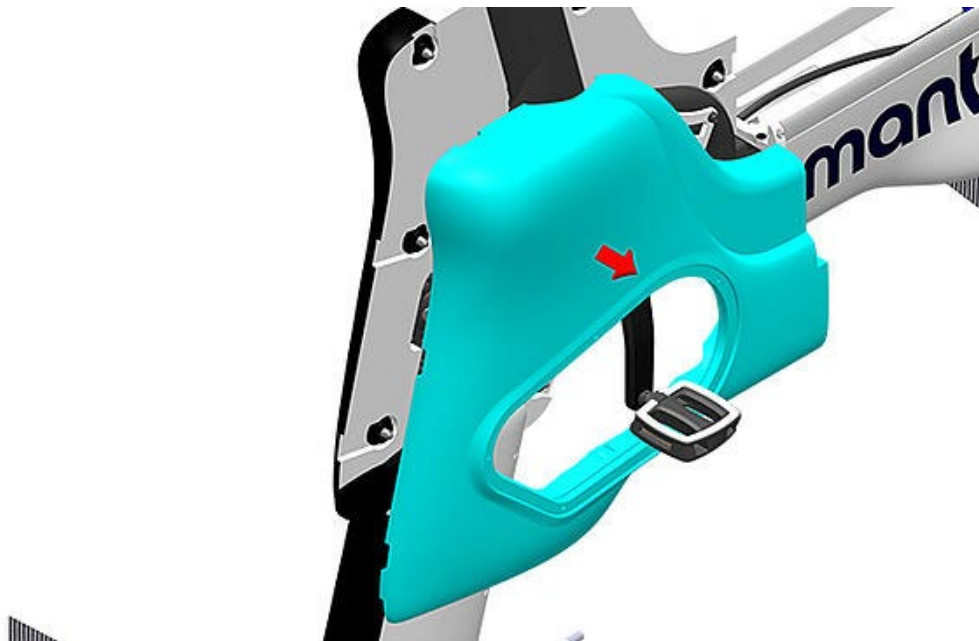
ID	Description	Task
	Long Nose Pliers	Remove Buoyancy Clips

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 at the top 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.



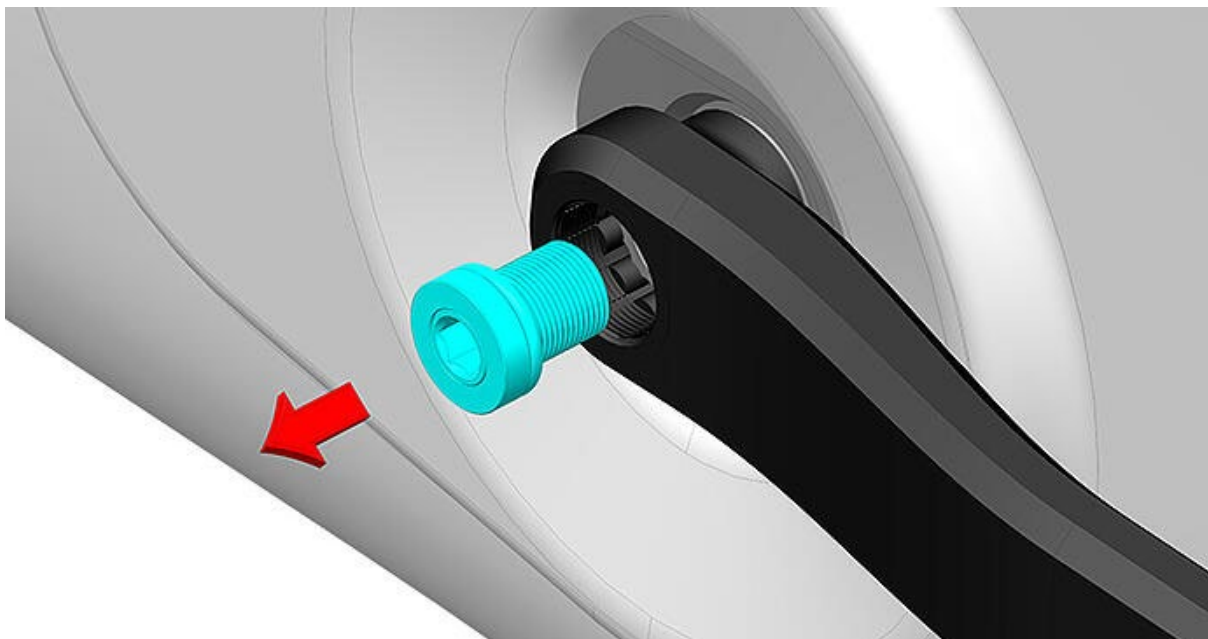
3. Remove LH Pedal Crank Arm

TOOLS REQUIRED

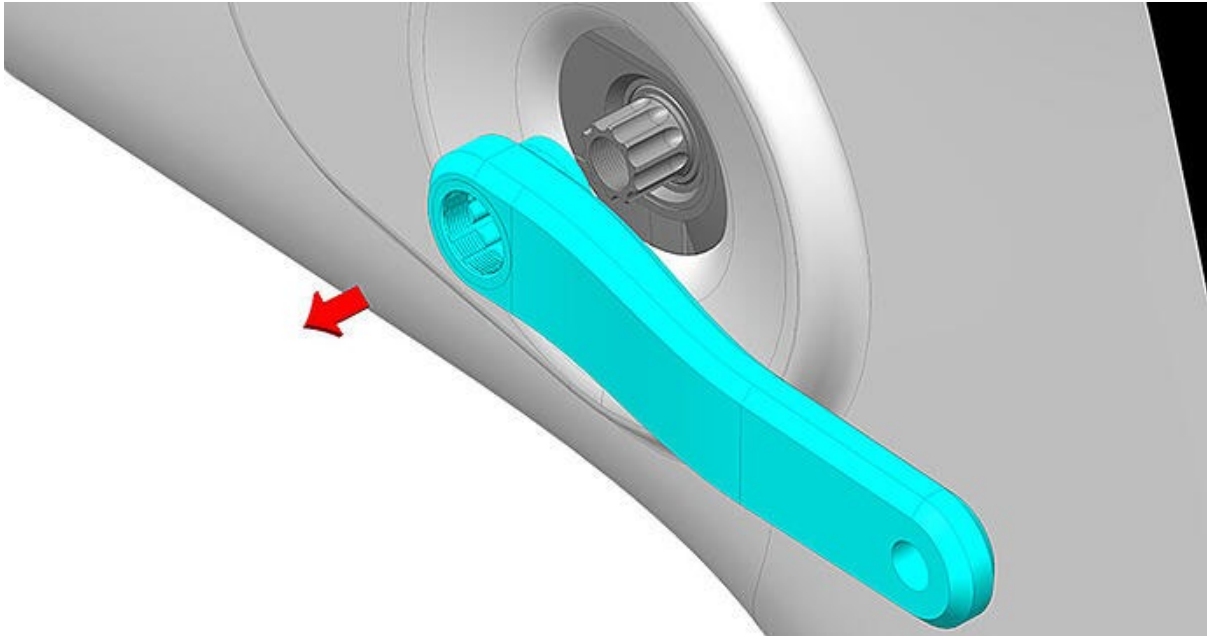
ID	Description	Task
	Hex Key 8 mm	Remove Crank Bolts
N/A	Park Tool Crank Extractor - CCP44	Remove LH Crank Arm

AVOID DROPPING THE BUOYANCY MODULES. SECURE OR HOLD THE LH BUOYANCY MODULE WHEN REMOVING THE LH CRANK FROM THE AXLE.

3.1 Remove Left-Hand Crank Arm 15mm ISIS Crank Bolt with a 8mm Hex Key.



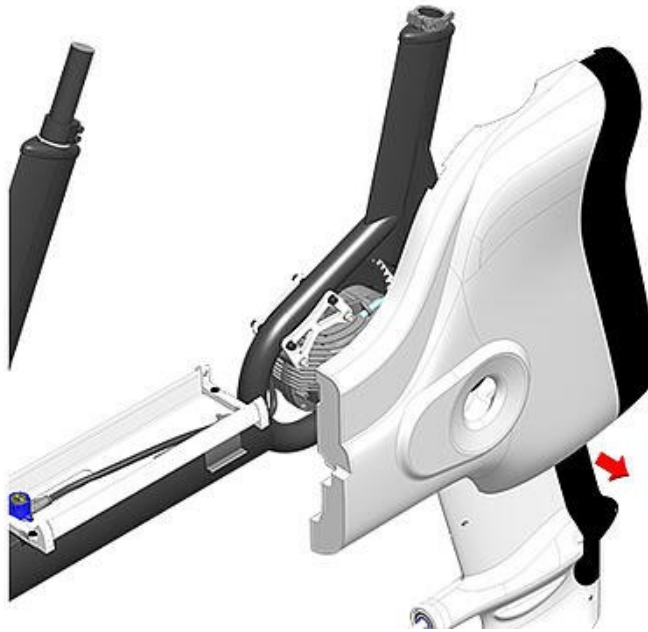
3.2 Remove Left-Hand Crank Arm with the Crank Extractor.



INFORMATION: Rotate the Crank Bolt anti-clockwise (right-hand thread) to loosen. Take note of the LH or RH markings on the outside face near the pedal end of the Crank Arms.

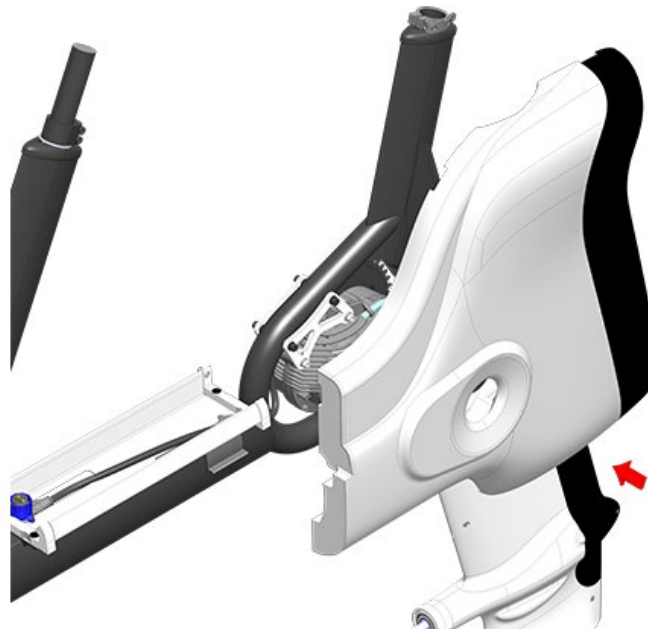
4. Remove the Left-Hand Rear Buoyancy Module

4.1 Remove Left-Hand Buoyancy Module



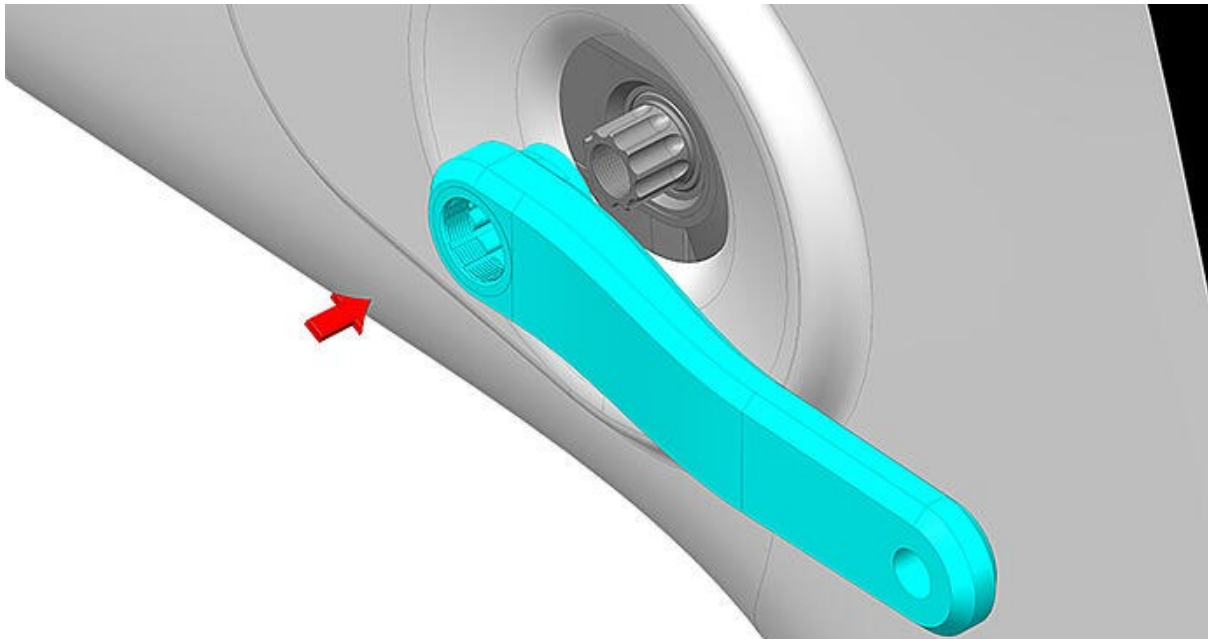
4. Fit LH Rear Buoyancy (Replacement if applicable)

4.1 Position and hold Left-Hand Rear Buoyancy Module.



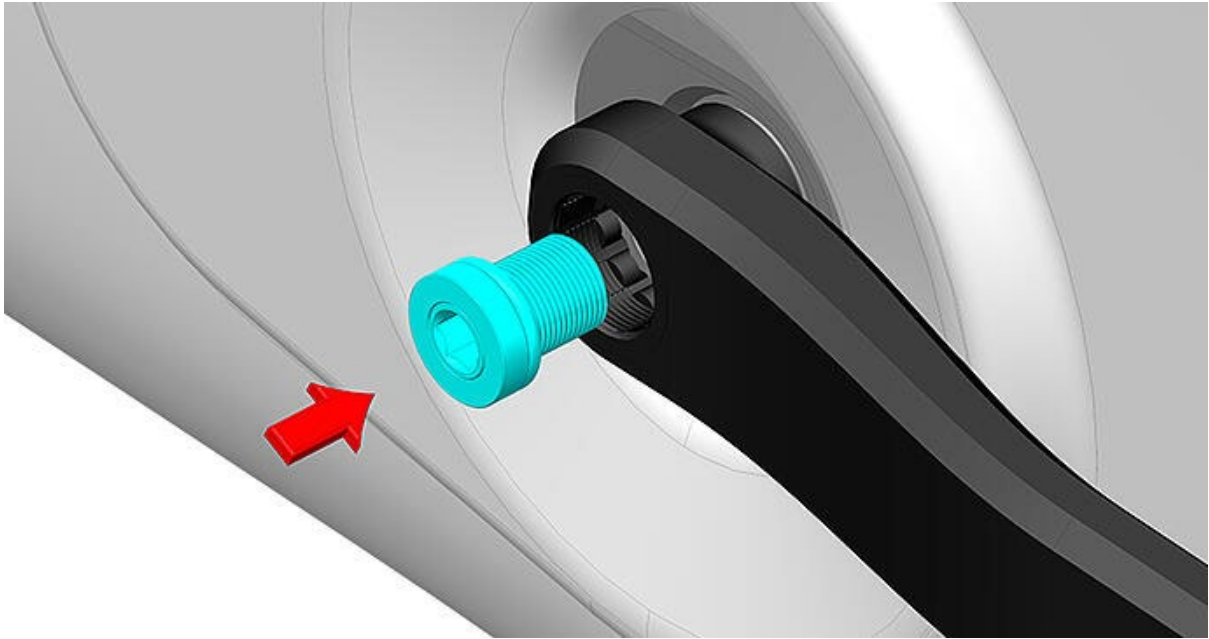
5. Fit Pedal LH Crank Arm

5.1 Assemble Left-Hand Crank Arm to Motor Drive Shaft Spline and secure with 15 mm Crank Bolt. [Tools: Rubber Mallet, 8 mm Hex, Torque Wrench set to 50 Nm]



INFORMATION: Fit the Left-Hand Crank Arm (marked LH on outside face adjacent to Pedal thread) to the Drive shaft Spline and tap it firmly into place using a small head rubber mallet without making contact with buoyancy components. **The Crank Bolt must progress at least two full turns without tension before tightening. Fastening the Crank Bolt with only one thread engaged can strip the thread from the Crank Bolt in which case it must be replaced.**

5.2 Fit a 15 mm ISIS Crank Bolt through the Left-Hand Crank to engage the internal thread of the Motor Drive Shaft. [Tools: 8 mm Hex, Torque Wrench]



INFORMATION: Use the Torque Wrench set to **50 Nm** and fasten to the pre-set torque level. Rotate the Crank Bolt clockwise (right-hand thread) to fasten.

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.

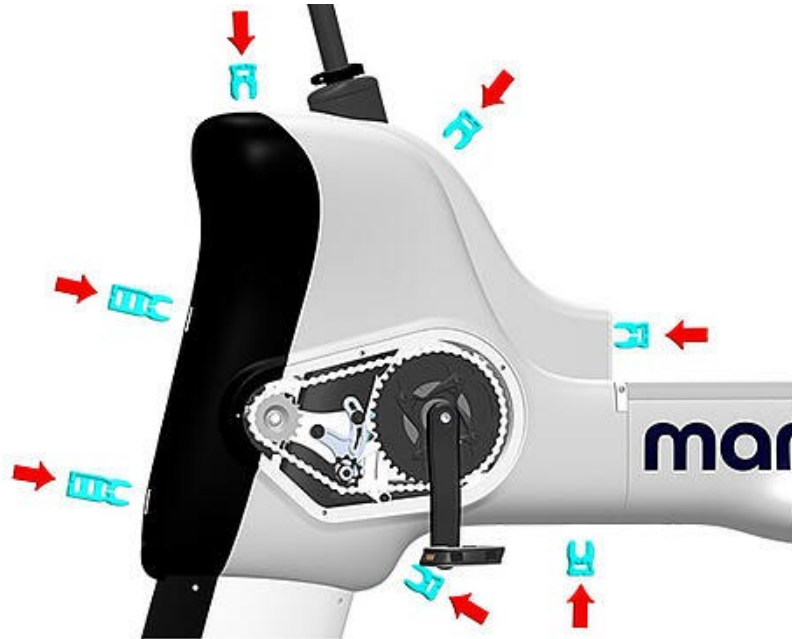


INFORMATION: If the RH Cranks is fitted, the Chain Guard must be removed before fitting the Rear RH Buoyancy to the bike.

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.



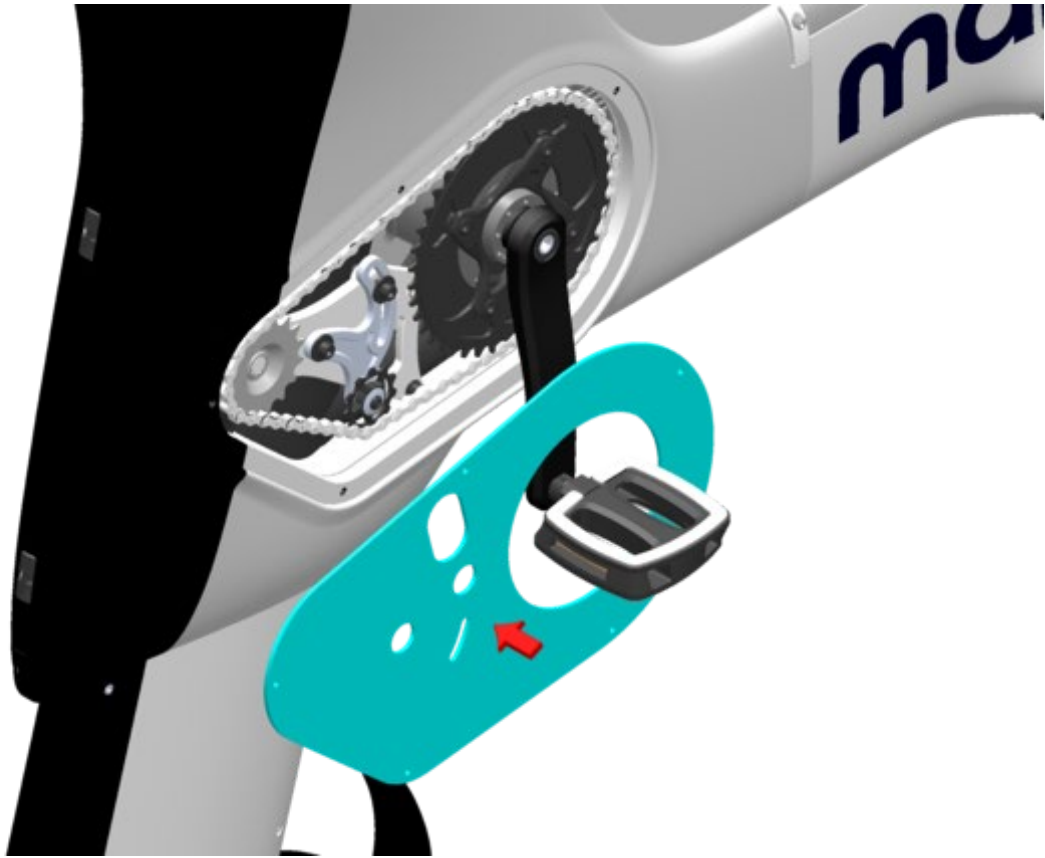
6.3 Fit all seven Buoyancy Clips to secure both LH and RH Buoyancy halves to the hydrofoiler. [Tools: Long Nose Pliers]



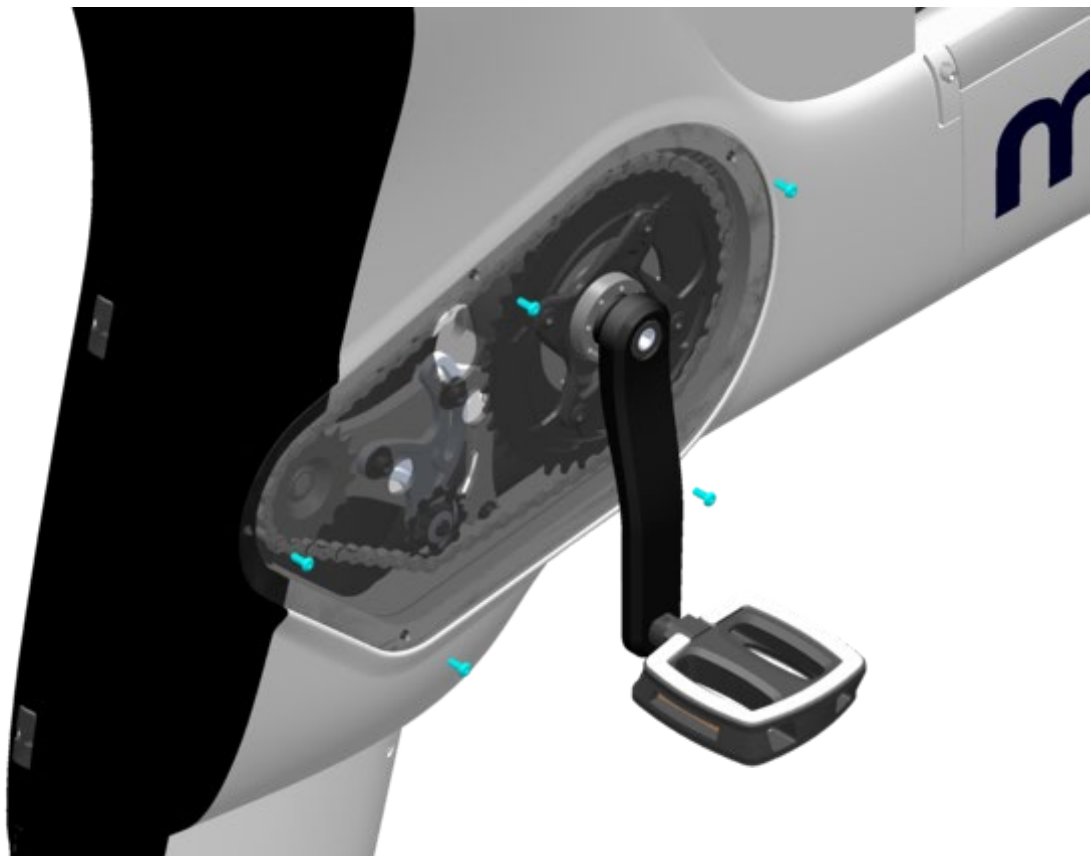
7. Fit Chain Guard

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

7.1 Fit the transparent acrylic Chain Guard over the RH Pedal and Crank and onto the RH Rear Buoyancy.



7.2 Align the Chain Guard with the recess on the RH Rear Buoyancy with screw holes aligned. Fit five 8-Gauge Machine Screws and fasten lightly. [Tools: 2.5 mm Hex Drive]



INFORMATION: If the machine screws are over tightened, they will slip in the insert without causing serious damage. To maximize the life of the Buoyancy Inserts, avoid over tightening and subsequent wear of the inserts.