



# Pump Maintenance and Care

Petticrows Tips and Guides

**Maintain your electric pump and troubleshoot problems**

All pumps and batteries are tested prior to fitting in the workshop



## Index

Introduction.....	1
Maintenance.....	1
Diagnose a Problem.....	2
Flat Battery.....	2
Corroded Plug Terminals.....	3
Blocked Impeller.....	3
Blocked Valve.....	3

## Introduction

A good maintenance routine for the Petticrows pump may extend its lifetime and prevent problems in it. This document contains some tips for maintaining your pump, as well as a guide to diagnose and fixing common issues that may arise. If you want to perform a maintenance routine refer to the Maintenance section. If you want to diagnose and fix a problem, proceed to the 'Diagnosing a Problem' section. Always feel free to contact us by telephone (+351 219 233 147) or by email ([petticrows@petticrows.com](mailto:petticrows@petticrows.com)).

## Maintenance

The first step is to open the pump. Press both blue buttons on the sides and pull the blue cap. The buttons that you are pressing should slide. Once you have pulled the blue cap all the way through, check if there is any algae or other type of debris inside the pump. If you find algae or debris inside try to remove them, you can use water to assist in the removal. Slide the blue cap back into the pump.

Verify if the black cables are not bent too tightly, they should not have any kinks. You can secure the cables to the pump using a plastic tie to ensure that the cables follow a smooth path.

Always wash the pump with fresh water after the maintenance procedure.



Verify if the batteries are both charged. You can check on your smartphone in the app ([link](#)). To fully charge the battery, it usually takes about 24 hours. The lower pump is going to be activated more often, and for this reason it should be connected to the solar panel. For light sailing the solar panel should be enough to keep the pump working. But if the pump is activated too often it can use the battery charge.

When the boat is not in use and under the cover, unplug the plug terminals. Check for any signs of corrosion, mainly if there are any green spots. Apply Vaseline around the inner part of the plug terminals to create a better seal against water.

You can also watch our YouTube video about the Petticrows pump [here](#).

## Diagnosing a Problem

This document has some of the possible causes of failure of the Petticrows pump. First check if the pump is functioning or making any noise. There is a red button located at the back of the pump, which activates it for a short period of time. If the pump is not functioning at all, it may be due to a flat battery or corroded plug terminals. Refer to the respective sections for guidance on what to do in each case. If you notice a reduction in the power of the pump, it could indicate corroded plug terminals. In that case, refer to the Corroded Plug Terminals section.

Afterward, watch the flow of water coming out of the pump. If there is only a small amount of water or none, it is possible that your pump has a blocked impeller or pipe. Consult the sections Blocked Impeller. If the pump still does not work proceed to the Blocked Valve section.

If the pump still doesn't work, please contact us.

## Flat Battery

You have two pumps, two batteries and a solar panel on your Petticrows Dragon. There should always be only one pump for each battery, one of the two pumps (the lower one) is also going to be connected to the solar panel.

Verify if the batteries are both charged. You can check on your smartphone in the app ([link](#)). To fully charge the battery, it usually takes about 24 hours. The lower



pump is going to be activated more often, and for this reason it should be connected to the solar panel. For light sailing the solar panel should be enough to keep the pump working, but if the pump is activated too often it can use the battery charge.

## Corroded Plug Terminals

First, you need to disconnect the plug terminals. To do that, unscrew the plug terminal. Check for any signs of corrosion, mainly if there are any green spots. If the plug terminal is corroded, you probably need a new one.

If there aren't any signs of corrosion, apply vaseline around the inner part of the plug terminals to create a better seal against water. Reinsert the plug and verify that it is tightly screwed in. Verify if the pump is working properly.

If it still doesn't work, please contact us by email ([petticrows@petticrows.com](mailto:petticrows@petticrows.com)).

## Blocked Impeller

The first step is to open the pump. Press both blue buttons on the sides and pull the blue cap. The buttons that you are pressing should slide. Once you have pulled the blue cap all the way through, check if there is any algae or other type of debris inside the pump. If you find algae or debris inside try to remove them, you can use water to assist in the removal. Slide the blue cap back into the pump.

## Blocked Valve

In the Petticrows pump there is a white plastic hose barb that connects the pump to the black pipe. This hose barb contains a black valve inside, which needs to be removed. To do so, unscrew and slide the valve all the way out. Clean the valve with water to remove any residue inside. Slide the valve back into the hose barb, ensuring it is facing the correct orientation. The tail of the valve should not be facing the pump. Screw the hose barb back into the pump.