

# How to Replace the Water Pump

**SCOPE:**

This Procedure Guide provides proper written instructions to ensure standard methodology for replacing the water pump on a Power Breezer Mobile unit MK 4.5.

**REVISION HISTORY**

Rev. No.	Date	Author	Comment
1	Jan 5, 2023	Luis Canela	Original Document
2			

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### Recommendations:

If after following the complete Instruction sequence and the problem persists, please contact Power Breezer customer service for assistance via phone at 1-844-233-5673 or by email at [customerservice@Powerbreezer.com](mailto:customerservice@Powerbreezer.com)

### Warnings:

- Any repairs on a Power Breezer® should be made only by authorized personnel or Power Breezer personnel. Any repairs/modifications by others will void the unit's warranty.
- Power Breezer has made every effort to ensure that the directions provided in this Instruction Guide are complete and accurate. Any attempt on the user's part to perform a do-it-yourself upgrade or repair will be solely at the reader's risk. Even when the Instruction Guide's instructions are carefully followed, the slightest misstep in disassembly or reassembly could result in further damage to the unit. If the user is unsure about how to diagnose/repair the unit as described in this Instruction Guide, please contact Power Breezer customer service for assistance at 1-844-233-5673 or [customerservice@powerbreezer.com](mailto:customerservice@powerbreezer.com)
- The information in this Instruction Guide is intended for use by individuals possessing adequate electrical, electronic, and mechanical experience, backgrounds, and skills. Power Breezer shall not be responsible for the interpretation of this Instruction Guide's information, nor will it assume any liability in connection with its use.

### Cautions:

- System hazards include mechanical pinch points, electrical hazards, and tripping hazards. Service should be performed by those with an understanding of such hazards.
- Turn off and unplug the Cooling Unit before filling or emptying the water reservoir.
- Turn off and unplug the Cooling Unit before moving.
- Turn off and unplug the Cooling Unit before cleaning it.
- Always unplug the Cooling Unit by pulling on the plug and never on the cord.

- Do not insert fingers or other objects inside the fan head, doing so may cause bodily injury.
- Children can fall into an open water reservoir and drown, even in a small amount of water.
- Keep children away from the reservoir. Keep the reservoir lid on at all times.
- Closely supervise all nearby children and pets when using this Cooling Unit. Do not leave the Cooling Unit unattended.
- Children should never be permitted to play with the Cooling Unit.
- When possible, unplug the system for service actions. Take appropriate precautions against electrical hazards when servicing live circuits.
- Use only on an outlet protected by a ground-fault circuit interrupter (GFCI). Avoid using extension cords.
- Do not allow the plug to become wet. Do not plug in/out while your hands are wet. Doing so increases the risk of electric shock.
- Do not alter the plug in any way.
- If the power cord is damaged, do not attempt to repair it yourself. Contact Power Breezer customer service for assistance. 1-844-233-5673 | [customerservice@Powerbreezer.com](mailto:customerservice@Powerbreezer.com)
- The Cooling Unit is not to be used by persons (including children) with a lack of experience and knowledge unless they have been given supervision or instruction.
- This Cooling Unit may be used by children aged 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the Cooling Unit safely and they understand the hazards involved.

When operating the Cooling Unit, use common sense. Stay clear of moving parts and only use water that is safe for drinking.

### Materials Required:

- Water Pump 12V/24V
- 2x 12in Zip Ties
- Electrical Tape

### Tools Required:

- 10mm socket
- 13mm socket
- Hand ratchet
- Small flathead screwdriver
- Gloves

### Persons Required:

- 1

### Safety gear:

- Safety glasses
- Gloves
- Voltage Tester/Non-Contact Voltage Tester

## Steps:

1. Proceed to turn the unit off with the circuit breaker on the unit, and disconnect the power cord from the outlet.
2. **CAUTION:**  
Before proceeding, confirm that you have the correct replacement part for your mobile unit. There are two types of water pumps: a 12 Volt and a 24 Volt. To verify that you have the correct part, compare the label on the old water pump with the label on the new replacement water pump.
3. Using the 13mm socket, remove the two lower bolts holding the E-Box in place. (E-Box is located in the lower rear part of the mobile unit.) See Figure 1.

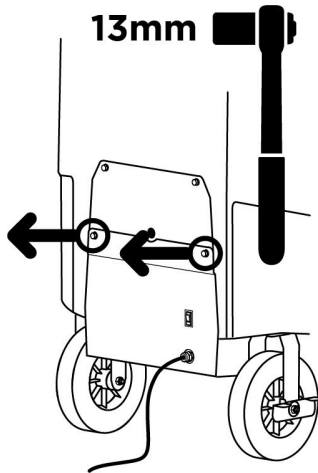
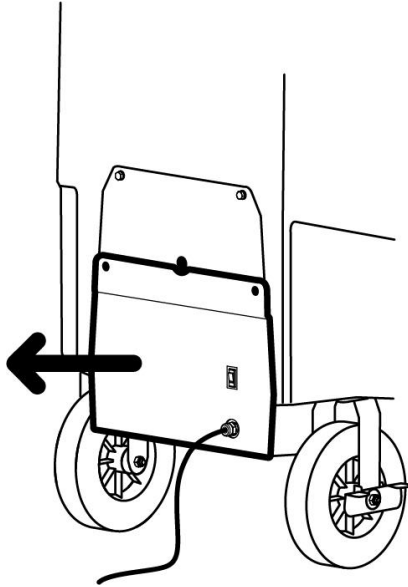
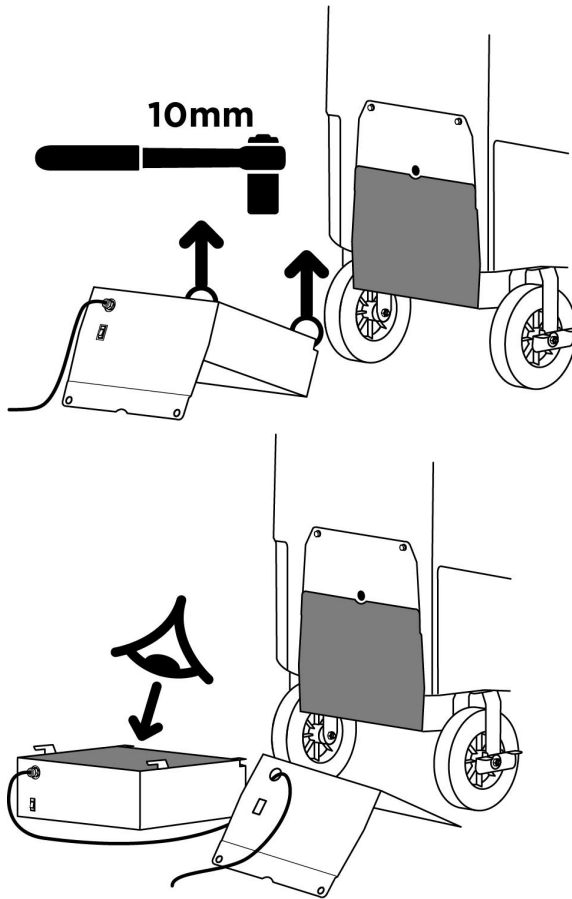


Figure 1

4. Gently slide the E-Box out of the mobile unit and place it upside down.



5. Removing the two 10mm bolts with the socket wrench allows the cover of the E-Box to slide off.



6. **WARNING:** For the next step, wear gloves that will electrically isolate you from the electrical components inside the E-Box.
7. Next, you must identify the wires for the water pump. This will depend if your model is a titan unit or a Max or Mach 4+. A thin black-sleeved cable that contains a red (positive), a black (Negative) wire and a Yellow (Speed) connected to a “**speed board**” (See figure 3.) in case of a titan unit the speed board is not present and the yellow cable might be tapped or cut the red and black cables are directly connected to the connector terminals. See Figure 2.

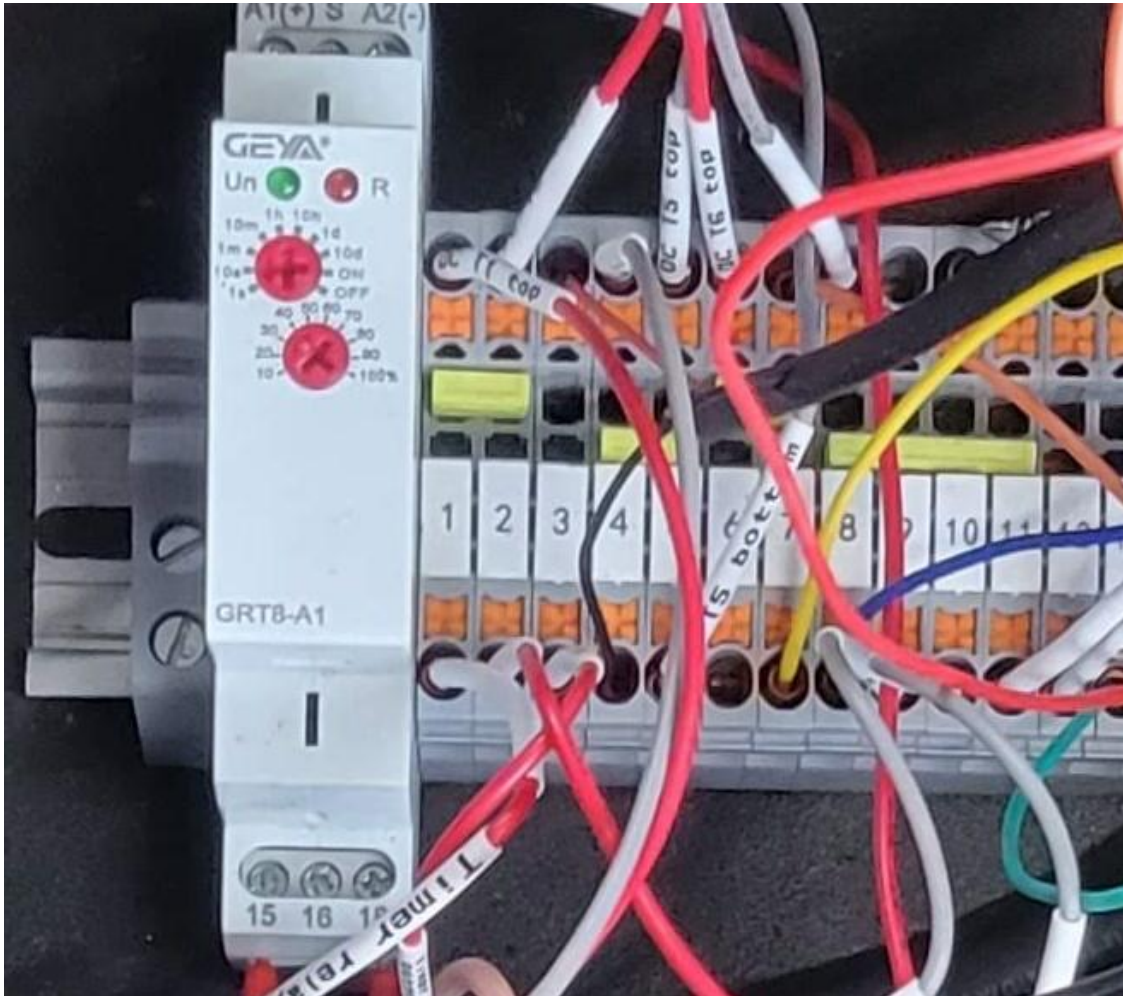


Figure 2.

8. **IMPORTANT:** If you have a TITAN model, make a note of where the wires are connected to the E-Box. For Example, T3 Top Positive and T4 Bottom Negative. See Figure 2.



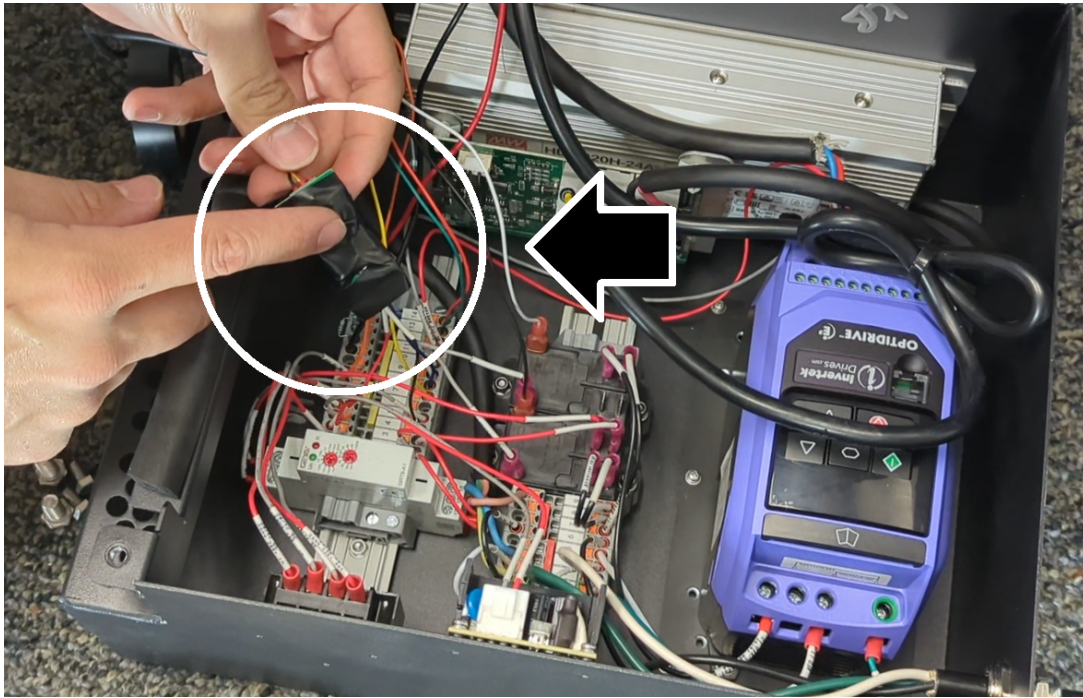


Figure 3

**NOTE:** BASE and MAX models of the Power Breezer mobile have their water pumps connected to a speed board. See Figure 3.

9. If your unit is a **TITAN** model. Using the small flathead screwdriver, remove the positive and negative wires. To remove the wires push down with the screwdriver on the orange pin next to the wire you wish to remove. The wire should slide out with little force.  
  
(On older connectors, utilize the screwdriver to push down into the hole next to the wire you want to remove.)
10. If your unit is a **BASE** or **MAX** model, disconnect the water pump wires from the speed board instead of the connector terminal. See Figure 4.

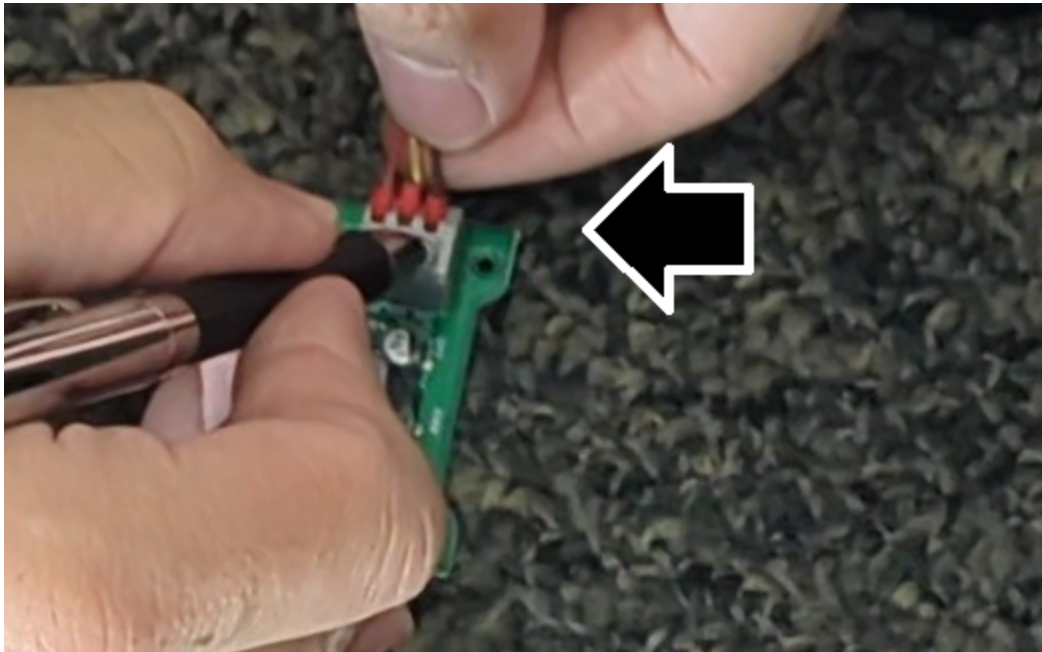


Figure 4

11. Remove the old pump by routing the cable back into the water tank. This can be done by gently pulling the cable from the tank towards the old water pump.
12. Proceed to remove the control panel/keypad holder from the unit just enough to see the hole where the wires are routed. (The keypad wire will still be connected.)
13. Remove the old pump by sliding off the blue tab on the quick disconnect fitting. Then pressing down on the white part of the disconnect fitting towards the water pump while gently pulling the tubing.
14. Install the new pump by sliding the tubing into the quick disconnect fitting until it is snug. Replace blue tab on fitting.
15. Add a zip tie to secure the water pump tubing and power cable together.
16. Run the cables from the main tank as they were before towards the control panel/keypad. Then proceed to push them down from the keypad area toward the E-Box utilizing the hole provided beneath the keypad.
17. Add a zip tie to the water pump cable inside of the water tank, on the upper part.
18. Reconnect the wires to the E-Box. Make sure to refer to the notes taken in **Step. 7** as not to incorrectly wire the water pump. Using the small flathead screwdriver to push down

on the orange pin and slide the wire into place. Then release the orange pin, and test a secure fit by gently pulling on the wire.

(On older connectors, utilize the screwdriver to push down into the hole next to the wire you want to insert.)

**NOTE:** TITAN models do not have a speed board. If your unit is a TITAN model, use electrical tape to tape off the yellow speed control wire's connection end.

19. Insert the keypad back to its location.
20. Carefully inspect all the wires are properly connected and close the E-Box.
21. Place the E-Box upside down and slide the cover on, ensuring that the two notches on the side slide into place.
22. Using the 10mm socket, place back the two small bolts securing the E-Box.
23. Place the E-Box back underneath the water tank.
24. Using the 13mm socket, place back the two bolts securing the E-Box to the water tank.
25. Test the unit and ensure proper operation.

### Reference Video:

- [Water Pump Replacement](#)

If you have questions and or problems applying the procedures found in this guide, please contact Customer Service by email at [customerservice@powerbreezer.com](mailto:customerservice@powerbreezer.com) or by phone at 844-233-5673.