

PFLUX1 110 – 220 Volt

Electrical Conversion Instructions
Applies to Gen 2/2022, serial # 2153001+



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READ AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS BEFORE USING THIS EQUIPMENT. Failure to follow all instructions listed below, may result in electric shock, fire, and/or serious personal injury or property damage.

Turn OFF the machine and remove/disconnect the power source!

A qualified electrician should do the conversion, or the machine can be taken to an Authorized Dealer Service Center. When completed, the machine must conform to the National Electric Code and all local codes and ordinances.

110-220V Converstion Kit, PFLUX1, Gen 2, serial # 2153001-

The voltage conversion procedure consists of rewiring the main motor and rewiring the circuit board to 220 volt; replacing the auto-clean motor, auto clean capacitor and the internal circuit breaker and plug. The PFLUX1, 220 volt conversion kit, # **PF1CONV220V** can be ordered from **LagunaTools.com** (https://www.shop.lagunatools.com/laguna-service-parts) or at **800-234-1976**.

The kit includes a 220 volt auto clean motor, circuit breaker, capacitor and hardware. A spare gear case is included but does not require to be changed if the existing one is in good shape. A 220V plug should be sourced locally and is **not** included with the kit.



Figure 2A: 220V, **Gen 2** kit, # **PF1CONV220V**

NOTE: Earlier PFLUX1 (Gen 1, serial number < 2131064, Fig. 2AA) can be converted from 110-220 volt using kit# ADCACKITPFLUX1V1.







Fig. 2AB: Gen 2 Control Panel

Converting Gen 2, PFLUX1 to 220 Volt:

(These instructions apply to **Gen 2/2022** & later models starting with serial # **2153001-**).

1. Change the wiring on the <u>1.5HP motor</u> to 220V wiring according to the wiring diagram located on the inside of the cover of the junction box (on the 1.5HP motor).

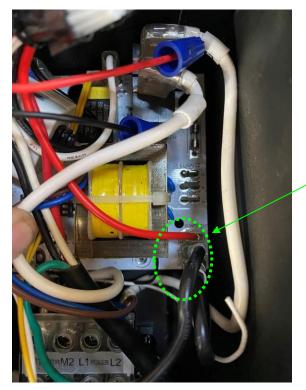
2. Remove the Control panel by loosening the four bolts circled below to access the circuit board.





Figure 2B: Mounting bolts (4) Figure 2C: Access to circuit board

3. Inside to the control box, remove the connectors (L1, M1, 110V RED) from the 110 volt location on the circuit board (see next figure). Also refer to the electrical diagrams at the end of these instructions.

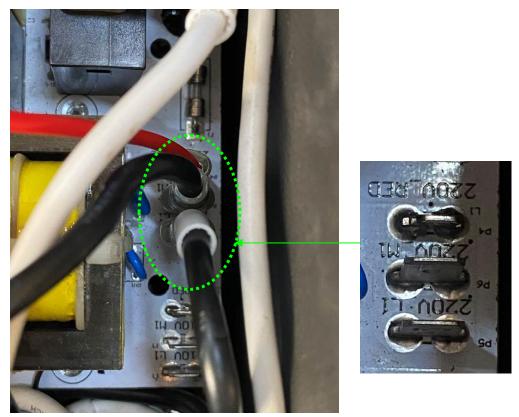


Use pliers to carefully remove these three pins, (2 black, 1 red).

Caution. The connectors may get damaged if pulled with excessive force.

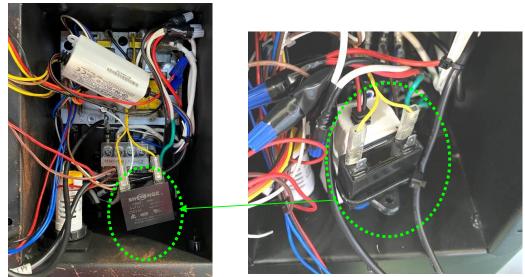
Figure 2D: 110V, circuit board wiring locations

4. Rewire each connector to the 220V location, L1, M1, 220V RED (see next figures). Also refer to the electrical diagram on last page of this guideline for reference.



Figures 2E & F: 220V, circuit board wiring locations

5. Remove the auto clean motor capacitor (6uF/250VAC) by disconnecting the two yellow connectors and replace it with the auto clean motor capacitor (1.5uF/450VAC). Make sure the two yellow connectors are connected in the same location as shown below. Always connect on the same side.



Figures 2G & 2H: Auto clean motor capacitor

6. Remove the 25A overload protector from the front control panel by first removing the two connectors.



Figure 2I: Replacing circuit protector

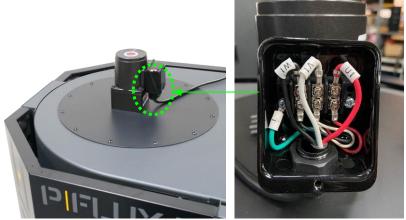
7. Loosen the nut holding the onboard 25A overload protector using a wrench.



Figure 2J: Replacing circuit protector

8. Replace with the 15A overload protector, close the control panel, and re-install the four bolts removed in step 1.

9. Open the junction box on the auto clean motor and disconnect the 110V wiring.



Figures 2K & 2L: auto clean junction box & 110 volt wiring

10. Release the spring-loaded band clamp at the bottom of the canister filter and remove the plastic debris bag.

Figure 2M: Releasing collection bag clamp



11. Remove the bolt and washer from the bottom center, of the flap pivot assembly, using a 12mm wrench.



Figure 2M: Removing flap pivot bolt (from underneath)

12. While supporting the canister filter assembly from the bottom, release the spring-loaded band clamp from the top of the canister filter assembly.

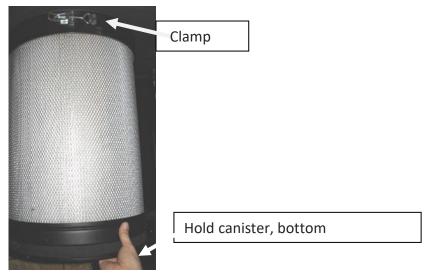


Figure 2N: Hold canister (from bottom) when releasing clamp (top)

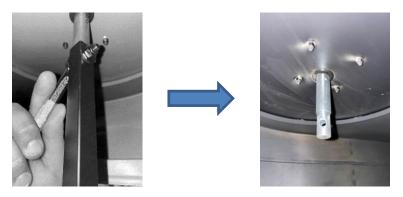






13. Remove the canister filter by carefully lowering the canister. Be careful to tilt the top of canister, if necessary, to clear the paddles.

14. Remote the rotation shaft from the cleaning spindle inside the dust chute by loosening (1) $5/16'' \times 1-1/2''$ hex bolt, (2) $5/16'' \times 0D18 \times 2$ flat washers and (1) 5/16'' lock nut.



Figures 2Q & 2R: Rotation shaft removal

15. Remove the auto clean plate and by loosening the (12) 3/16"*1/2" sheet metal thread bolts.



Figures 2S & 2T: Auto Clean Plate

16. Loosen the four bolts on the 110V auto clean motor connecting it to the gearbox below. ONLY remove the 110V auto clean motor (tope), do not remove the gearbox (below).



Figure 2U: Motor attachment bolts (2 of 4). Figure 2V: Auto clean motor

17. Attach the 220V auto clean motor by using the four bolts removed in the previous step.

18. Open the junction box of the 220V auto clean motor and connect the wiring per next two figures and confirm to wiring diagrams.



Figure 2W: 220V bottom wiring in auto clean junction box



Figure 2X: 220V top wiring in auto clean junction box

19. Confirm all connections are tight and secure. Install all covers, panels, etc., and secure.

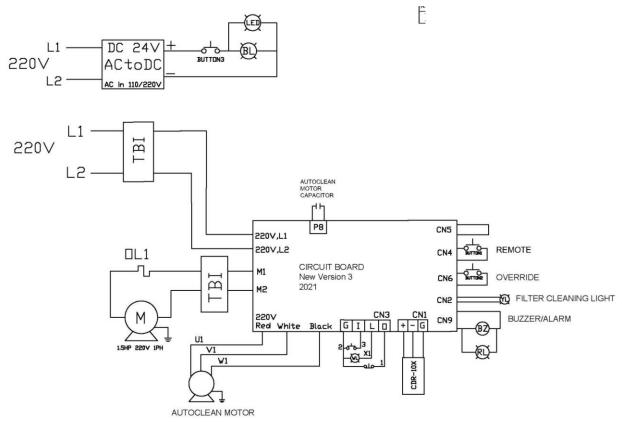
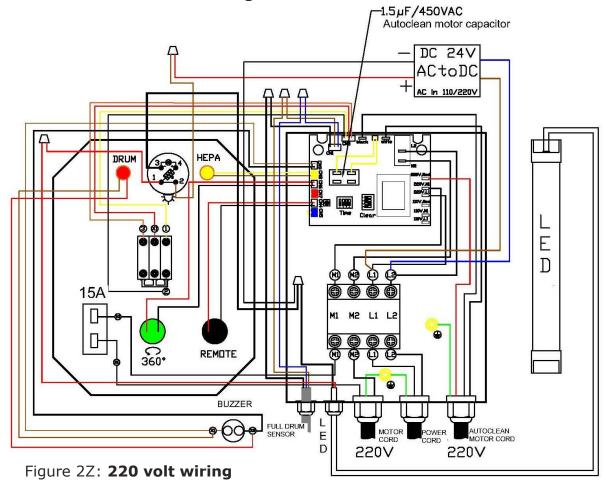


Figure 2Y: PFLUX1 220 volt wiring

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