

Replacement Instructions for SW-23 CONTROL BOX ASSEMBLY

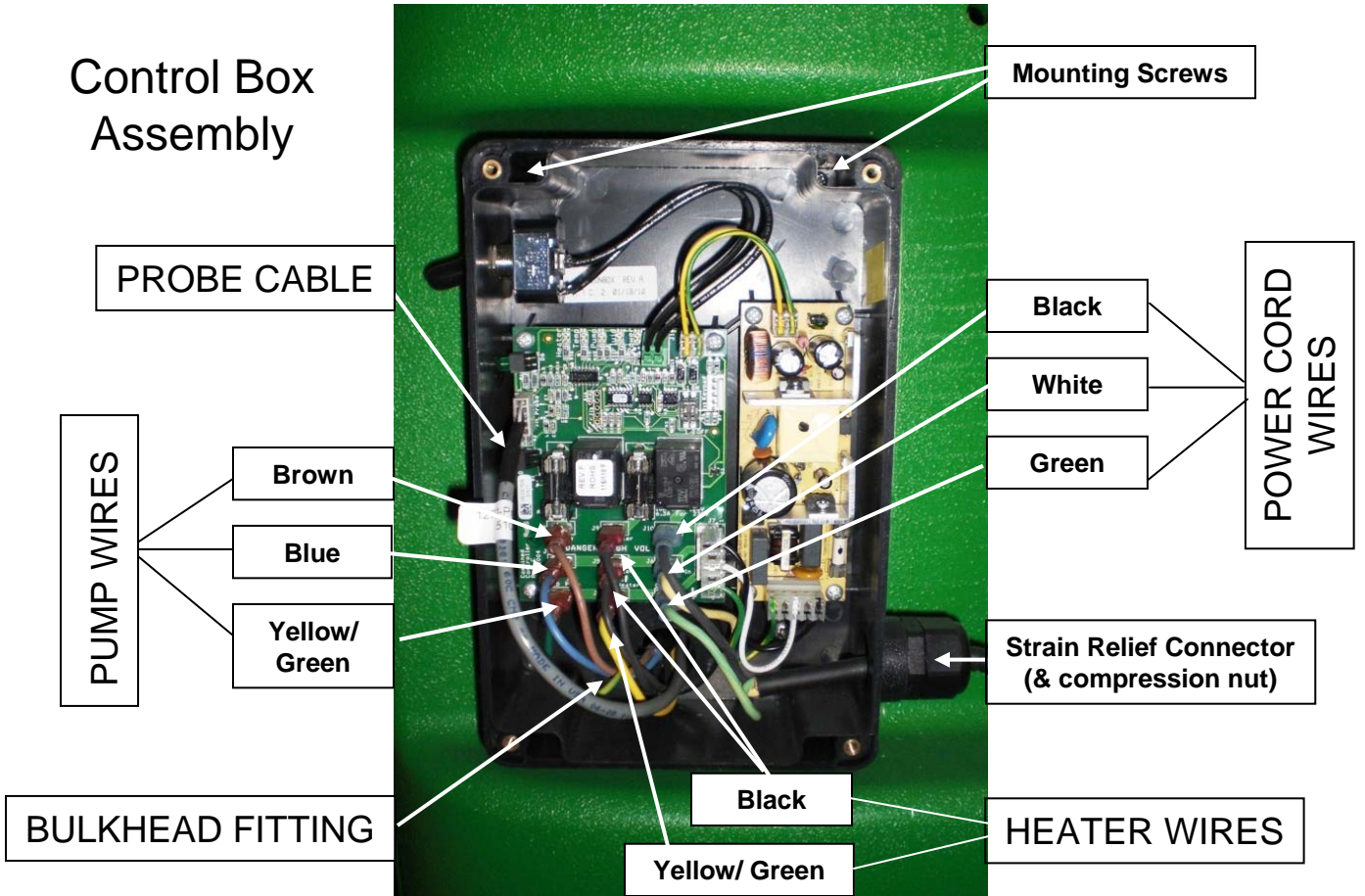
Tools Required: Phillips head screwdriver, 1/4" socket wrench with 3" or larger extension, slip joint pliers, 3/8" nut driver, 5/16" nut driver, pliers, drill and 3/16" drill bit, safety gloves, shop towel

Before beginning, pump any fluid from the machine into buckets or empty fluid boxes. This will make changing the parts easier and provide a chance to clean out any sludge buildup that may be in the base.

1. Unplug the SmartWasher from the power source.
2. Remove the quick release pins that secure the sink to the base.
3. Disconnect the sink hose from the base by releasing the metal rings on the quick connect coupling.
4. Remove the sink and set aside.
5. On the outside of the base, detach the control box lid by removing four screws with the Phillips head screwdriver.
6. On the inside of the base, detach the heater box lid by removing four screws with the Phillips head screwdriver. **BE CAREFUL NOT TO DROP THE SCREWS INTO THE BASE.**
7. Disconnect the probe cable from the control board. Using the pliers, disconnect the pump wires (left), heater wires (middle), and power cord wires (right) from the control board. ***See diagram***
8. Feed the pump wires from the control box through the bulkhead fitting into the heater box inside of the base. Repeat this with the heater wires and the probe cable. Tie the heater wires, probe cable, and pump wires into a loose knot to keep them from falling into the base.
9. Use the 3/8" nut driver to hold the lock nut located to the left of the bulkhead fitting inside of the heater box. Using the Phillips head screwdriver, loosen and remove the screw inside of control box. Set the nut and screw aside to be reused.
10. Use the 1/4" socket and slip joint pliers to loosen the bulkhead fitting nut inside of the heater box. Remove the washer and nut from inside of the heater box. Carefully pull heater box away from the bulkhead fitting and the side of the base. Allow heater and attached box to rest in the bottom of the base. Remove the rubber washer located on the bulkhead fitting between the heater box and the inside wall of the base and set aside to be reused. Pull bulkhead fitting from control box and set aside.
11. Locate the mounting screws (outside of base on top back wall of control box) and lock nuts (inside base wall above heater box) that attach the control box to the base. ***See diagram*** Hold the lock nut using the 5/16" nut driver and use the Phillips head screw driver to remove each screw. Set aside the nuts once they are removed. Pull the control box away from the base. Remove the screws from the control box and set aside.
12. Locate the strain relief connector used to secure the power cord on the outside of the control box. Loosen the compression nut using the slip joint pliers and pull power cord wires through the strain relief connector and remove from control box.
13. Using the 5/16" nut driver and Phillips head screw driver, attach new control box to the base with screws and nuts from the old control box.
14. Insert the bulkhead fitting through the control box into to the base wall. In the base, replace the rubber washer that was removed with the heater box assembly (between the wall of the machine and the heater box). Place the heater box assembly on the bulkhead fitting. Replace the washer inside the heater box and tighten the bulkhead fitting nut. To fully tighten, use the 1/4" socket and slip joint pliers.
15. Using the 3/16" bit, drill through the existing hole in the heater box and base (located to the left of the bulkhead fitting) into the new control box. Insert the screw into hole from control box through the base wall and into the heater box. Attach the lock nut and tighten using the 3/8" nut driver and Phillips head screwdriver. This screw provides extra support to the bulkhead fitting.
16. Untie the loose knot of probe, pump, and heater wires. Feed the probe cable through the bulkhead fitting into the control box and connect to the control board. ***See diagram***
17. Feed the pump wires through the bulkhead fitting into the control box and connect to the control board. From top to bottom, the wires should be: brown, blue, and yellow/green. ***See diagram***
18. Feed the heater wires through the bulkhead fitting into the control box and attach to the control board. From top to bottom, the wires should be: black, black, and yellow/green. ***See diagram***
19. Replace the heater box lid and tighten the screws using the Phillips head screwdriver. **BE CAREFUL NOT TO DROP THE SCREWS INTO THE BASE.**
20. On the control box, loosen the strain relief connector compression nut located on the right side. Feed the power cord wires through the compression nut and then through the strain relief connector until about an inch of black cord is showing inside the control box. Tighten the compression nut onto the strain relief connector until cord does not move freely through the connector. Connect the power cord wires to the control board. From top to bottom, the wires should be: black, white, and green. ***See diagram***
21. Replace the control box lid and tighten the screws using the Phillips head screwdriver. **If it is in good condition, use the original lid with the serial number label. If the original lid is not reusable, see instructions below.**
 - a. On the inside of the new control box lid, use a permanent marker to write or label the Serial Number above or below the schematic label. The Serial Number is located at the bottom of the large white label on the outside of the control box lid (indicated by SN). Repeat this on the outside of the new lid as well. **THE SERIAL NUMBER IS REQUIRED FOR WARRANTY CLAIMS.**
 - b. Call ChemFree at 1-800-521-7182 to inform Customer Service the control box lid has been replaced. Please have the serial number readily available for the call.
22. Replace the sink. Plug the quick release pins back into the sides of the base. Reconnect the sink hose and push the metal rings toward the base to lock into place.
23. Replace the fluid in the base of the SmartWasher. Plug unit into power source and test.

If you have any questions about these procedures or if your SmartWasher is configured differently than described in these instructions, PLEASE CALL CHEMFREE CUSTOMER SERVICE AT 1-800-521-7182 or visit us on the web at www.chemfree.com for more detailed instructions, including instructional videos.

Control Box Assembly



Heater Box Assembly (interior)

