Operator Control Station

XL4 BATTERY REPLACEMENT

It is recommended that this procedure be completed by a technician who is familiar with electronics. EPG Companies is not responsible for damage caused to the OCS by improper handling, excessive force, or deviation from the below instructions.

TOOLS NEEDED:

• Small/medium Phillips head screwdriver (Do not use any power tools, as they will strip the plastic)

<u>WARNING:</u> Always clone the OCS to a MicroSD card before working on it. This ensures you do not lose settings, totalizers, ETMs, etc. If you do not have a MicroSD card already in your OCS, EPG can ship one to you.

- 1. Backup your OCS by making a "clone" to the MicroSD Card.
 - 1a. Press SYSTEM
 - 1b. Go to "Clone Unit", press return
 - 1c. Press "Make Clone", (Are you sure?) "OK" (Successful) "OK"
 - 1d. Press "Esc" twice to leave the SYSTEM menu.
- 2. Power off the control panel, and remove the OCS from the panel by popping off all connectors, unscrewing the 4 metal clamps, and pulling it out the front of the panel.
- 3. Place the OCS, screen down, on a stable, non-metallic surface and unscrew the screws from the 4 corners on the back cover. Lift off the back cover and set it aside. *See figures A and B*.





Figure A

Figure B

- 4. Notice the 24 tall pins protruding up through the circuit board (near the end of the orange connector). These are the only connection between the I/O board and the motherboard, and where the boards will be pulled apart. Separate the I/O board from the motherboard as follows:
 - 4a. Grasp the OCS with your left thumb in the LAN1 port and your left index finger at the top edge of the plastic above the MEMORY slot, as shown below (See Figure C).

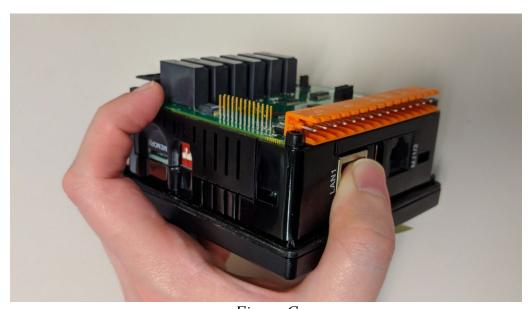


Figure C

4b. With your right hand, grasp the orange and black connectors on either side of the I/O board.

4c. Begin gently rocking the board back and forth with moderate upwards pressure to pull it off the 24 through-pins. See the below video (*Figure D*).

[insert video here]
Figure D

5. Carefully remove one side of the mylar tape that holds the battery down, and pull the tape and fabric pad off the battery. These will be reused, so take every precaution not to damage them. (See Figure E)



Figure E

6. Remove the battery, and insert the new battery in the same orientation. Use only a 14500 lithium-ion 3.7V battery, as shown in *Figure F*.



Figure F

- 7. Replace the fabric and tape over the new battery.
- 8. Replace any black, plastic side plates if they came off when separating the boards.
- 9. Replace the I/O board by carefully lining up the 24 through-pins with the black connector on the underside of the I/O board, and gently press them together. If more force is required than what was used to take them apart, STOP, and make sure it is lined up probably to avoid bending any pins. When the orange side connector is fully seated against the plastic casing, the boards are completely together. (See Figure G)



Figure G

- 10. Replace the back cover. When in the right orientation, J1 should point to the long orange connector, J2 points to the long black connector, and J3 points to the short black power connector.
- 11. Replace the 4 screws. CAUTION: The screws are self-tapping into plastic. To ensure you reuse the same threads (and avoid stripping the hole), always turn the screws counterclockwise until you hear/feel the threads engage with a slight thump, then tighten gently. If it feels like you are cutting new threads in the plastic, STOP, and try to engage the existing threads once more.
- 12. Reinstall the OCS in the panel, reversing your operations of step #2. Power up the control panel and give the OCS about 1 minute to boot up completely.

(If updating firmware, do it now. See bulletin 8591.)

- 13. Load the clone you made in step #1 by doing the following:
 - 13a. Press SYSTEM
 - 13b. Go to "Clone Unit", press return
 - 13c. Press "Load Clone" (Are you sure?) "OK"
 - 13d. The OCS will load the clone and reboot. Allow another minute and everything should be back up and running as it was before.