

## Subject: PowerVar UPS Firmware Update

### Overview:

During certain very short power fluctuations, the 500VA PowerVar UPS shipped in U-Scan Next Generation Robots can lock up. This is a very rare occurrence and has only been verified in 1 customer.

### Solution:

To eliminate this potential the firmware within the UPS needs to be updated to version F-V3.

This applies to:

- UPS-1004
- UPS-1004A
- UPS-1004B

This update only applies to the field, and only North America, though it has only been reported in Canada. Reference FCA-08-006 for specific field actions. A summary of the recommended actions is: All NA spares stock to be updated, All units returned for repair to be updated, and all units installed at Loblaws to be updated.

All updated units will have a label applied above the serial number label "UPGRADED TO F-V3", ref step 18 below.

### Tools Needed:

- Phillips Screwdriver
- Small Flat blade screwdriver or "Tweezer"



### Parts Needed:

The following Kit is available.  
Each kit contains enough parts to update 5 UPS's.

UPS-1007 Kit, PowerVar Firmware F-V3 Upgrade (PowerVar Part Number 87013-50)

Each kit contains the following:

- |                             |       |
|-----------------------------|-------|
| Firmware Chip, Version F-V3 | Qty=5 |
| Upgrade Label               | Qty=5 |
| Tamper Proof Label          | Qty=5 |
| Upgrade Instructions        | Qty=1 |

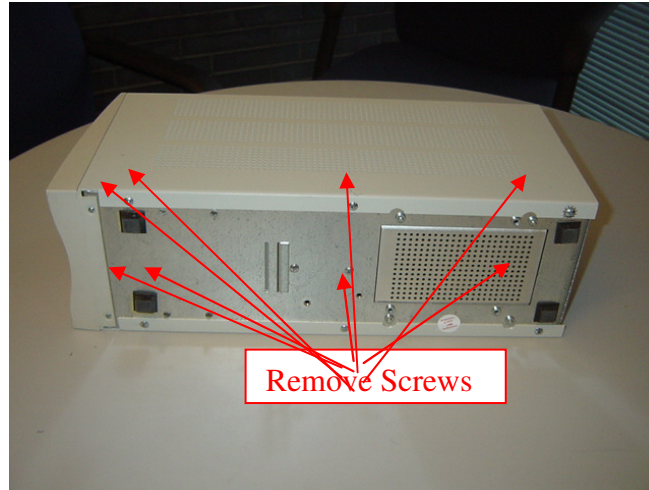
### Time to Upgrade:

- 20 Minutes per Unit (10-15 minutes once familiar with the process)

<u>INQUIRIES TO:</u>	DATE
Fujitsu Transaction Solutions Inc.	
Exchange: Sustaining Engineering	_____
Mail: Fujitsu USA04, Sustaining Engineering	_____
FAX: 858-731-4781 (7888-4781)	_____
Internet: <a href="mailto:SustainingEngineering@ftxs.fujitsu.com">SustainingEngineering@ftxs.fujitsu.com</a>	_____
FTP: <a href="ftp://ftp.ftxs.fujitsu.com/">ftp://ftp.ftxs.fujitsu.com/</a>	_____
Original signature copies maintained by Sustaining Engineering.	

**Instructions:**

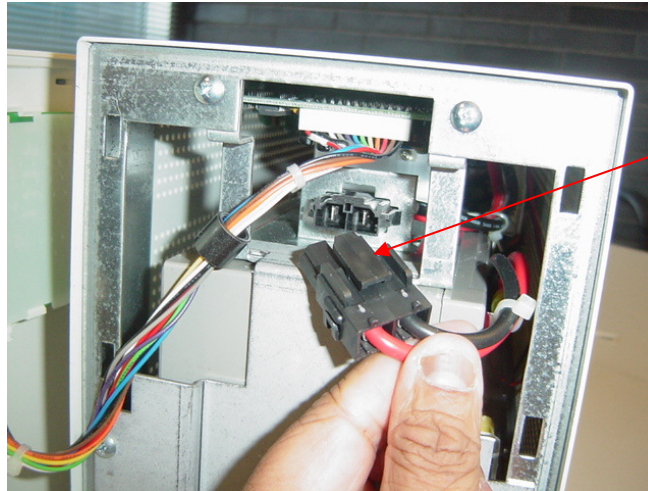
1. When ok to do so turn off the UPS by holding the ON / OFF button for 3 seconds. (blue button marked  $\text{\textcircled{O}}$ ). All LEDs on the front of the UPS should be off.
2. Remove all loads connected to the UPS by un-plugging them from the rear outlets.
3. Remove AC power to the UPS by removing the input power cord to the UPS.
4. Move the UPS to area where it is safe to work on and place the unit on its left side (looking at the unit from the front).
5. Remove the cover and front panel screws. Do this by removing the 8 screws (2 for the front panel and 6 for the cover.) located on the bottom of the unit. (save all the hardware as it will be reused).



6. Turn the unit back on to its rubber feet. Then carefully remove the front panel by sliding the panel down and then out. (Note the front panel is attached to the PCB assembly).



7. Disconnect the battery connector as shown. (The connector is locked in place. The top of the connector must be squeezed to unlock it).

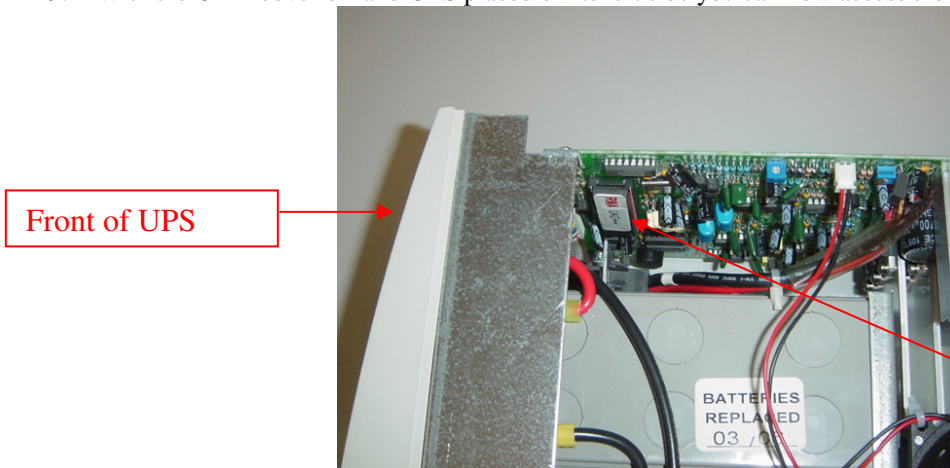


Squeeze the lock tab to disconnect

8. Remove the cover fully off of the UPS by sliding it to the rear of the unit. (Take care not to rub the cover against the PCB).



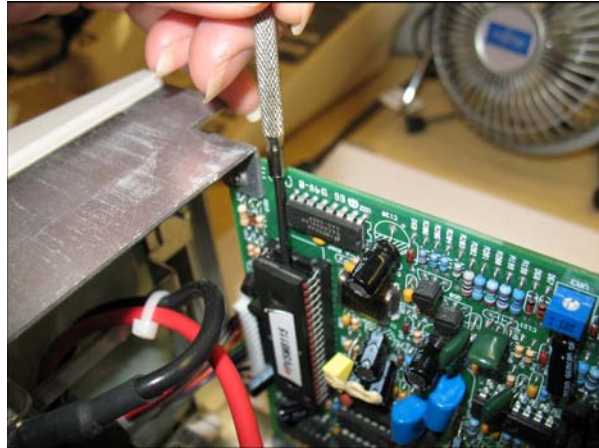
9. With the UPM cover off and UPS placed on its left side you can now access the EPROM.



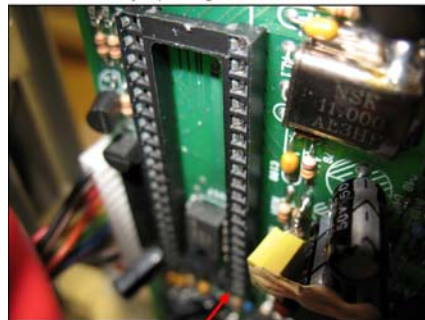
Front of UPS

EPROM Location

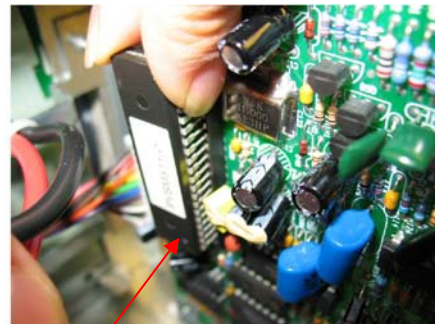
10. With the small flat blade screw driver or Tweezer carefully remove the old EPROM chip. (Take care as not to bend any pins or short-circuit other components. Take your time). See picture below.



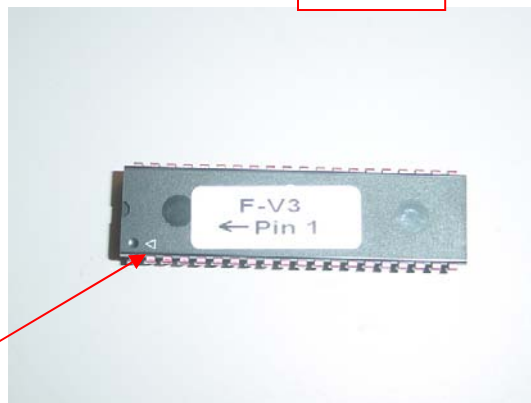
11. Install the new EPROM chip supplied in the replacement kit by aligning all pins very carefully then pressing firmly until all pins are in the socket tightly. **(IT IS IMPORTANT TO ALIGN PIN 1 OF THE CHIP WITH PIN 1 OF THE SOCKET)**. See picture for illustration.



Pin 1 on bottom



Pin 1



Pin 1 of the chip


12. Place the UPS back on to its rubber feet.
13. Reattach the battery connector that was disconnected in step 7 (Insure the connector has snapped and is locked in place).
14. Reattach the front panel that was removed in step 6.
15. Reattach the cover by sliding the cover from the rear of the unit to the front. The Cover is keyed so it will only fit in one direction. If the cover will not fit turn it around.
16. Place the unit on its left side and insert and tighten all the cover and front panel screws.

17. Place new “WARRANTY VOID IF SEAL IS BROKEN” sticker supplied in the replacement kit over the old sticker.



18. Turn the unit back over onto its rubber feet and place “UPGRADED TO F-V3” sticker supplied in the replacement kit on top of the cover as shown.



19. Apply input AC to the UPS and power on by holding the ON / OFF button for 3 seconds. (blue button marked ). All LEDs on the front of the UPS should be green. Reconnect the loads. Upgrade was successful.