

Trouble Shooting Guide, Electrical

Applicable for W850 and W830

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General

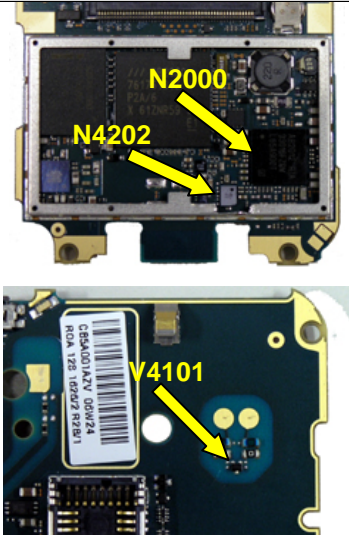
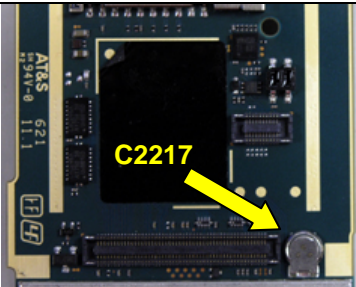
The purpose of this document is to indicate the electrical level repair actions associated with the different failure symptoms.


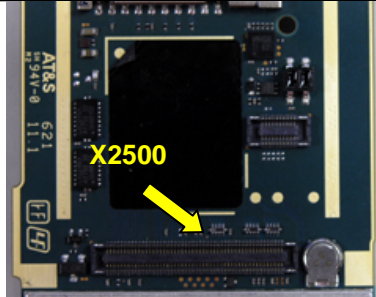
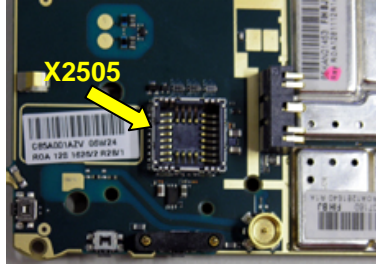
For symptoms that have multiple repair actions, the repair actions are listed in order of their probability of creating a successful repair. The first action has the highest probability, and subsequent actions have lower probabilities. The intention is for the repair technician to implement the first repair action and then retest the phone. If the phone continues to fail the same test, then the technician should continue to the second repair action. If the phone continues to fail the same test after all of the repair actions are exhausted, then the phone will be considered not reparable at this level.

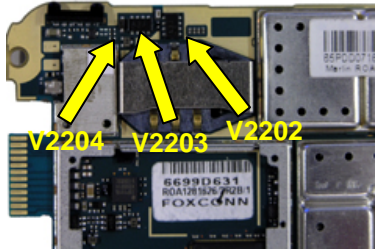
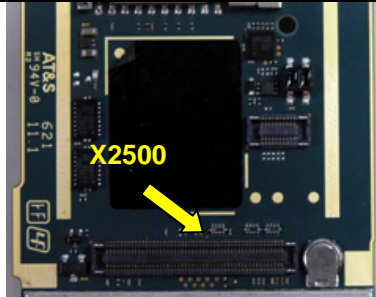
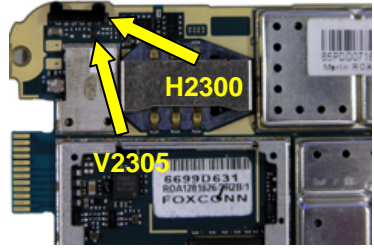
This document should be used only after the actions from the Mechanical Trouble Shooting Guide have been exhausted for the specific symptom.

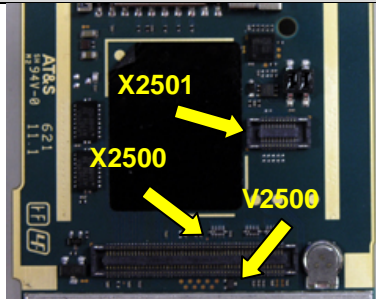
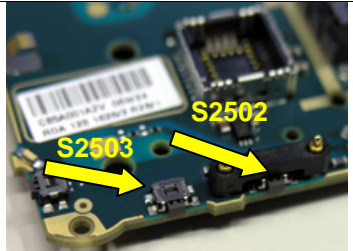
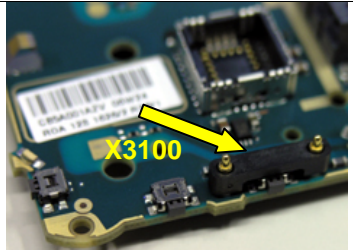
Voltage, current, and resistance information is provided for some symptoms to enable faster repairs. Perform current measurements using a dummy battery and power supply with digital current display. The phone should be fully assembled. Perform voltage and resistance measurements with a multimeter. Purchasing this equipment and performing these measurements is optional but recommended.

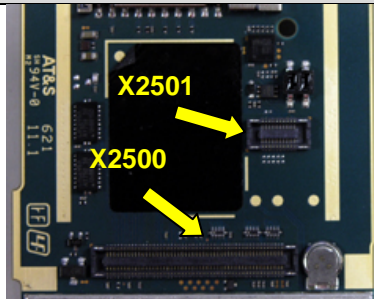
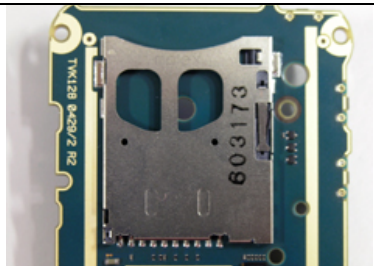
1 Repair Actions for Manual Test Failures

Failure	Failure Symptom	Repair Action	Pictures
1.1 Audio	Audio problem with accessories	Replace N4202 Replace N4100 Replace N2000	
	Loudspeaker problems	Replace V4101 Replace N2000	
	Microphone problems	Replace N4202 Replace N2000	
1.2 Backup bat	The clock has to be set after the battery has been detached.	Replace C2217	


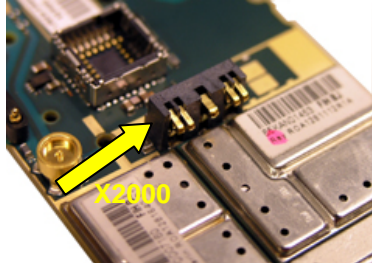
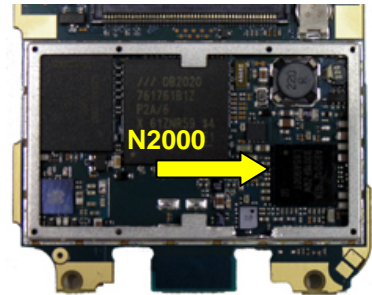
Failure	Failure Symptom	Repair Action	Pictures
1.3 Bluetooth		Replace N2204 Replace D1400	
1.4 Camera	Any problem with the Mega pixel camera	Replace N2202 Replace N3100 Replace X2505 if damaged	
	Any problem with the video call camera	W850 ONLY. W830 does not include this camera. Replace X2500 if damaged Replace D3100, D3101	

Failure	Failure Symptom	Repair Action	Pictures
1.5 Charging	Can't charge	Replace V2202, V2203 Replace V2204	
1.6 Display	Any problem with the LCD	Replace X2500 if damaged	
1.7 IRDA		Replace H2300 Replace V2305	

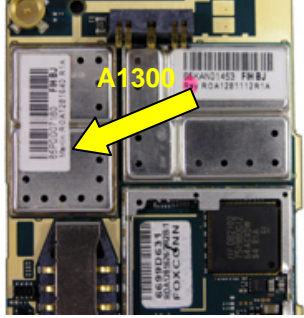
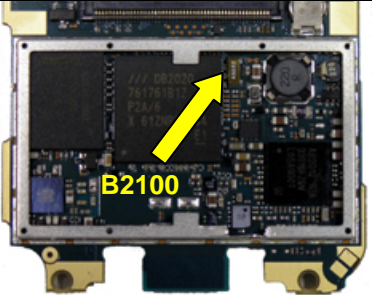
Failure	Failure Symptom	Repair Action	Pictures
1.8 Keyboard	Numeric keyboard	Replace X2501 if damaged Replace V2500	
	Navigation keyboard or A and B key	Replace X2500 if damaged Replace V2500	
	Volume up keys	Replace S2503	
	Volume down keys	Replace S2502	
1.9 LED's and illumination	Charging LED (RED)	Replace V3110 Replace V3113	
	Flash LED	Replace X3100 if damaged Replace V3114	

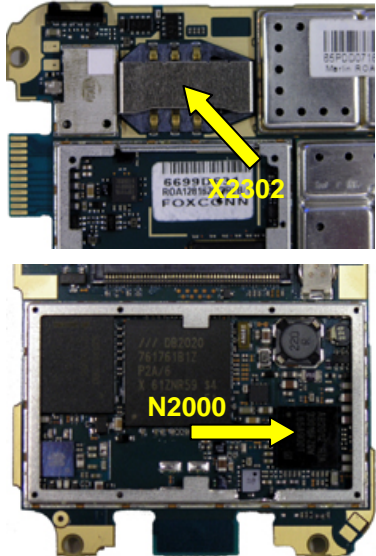
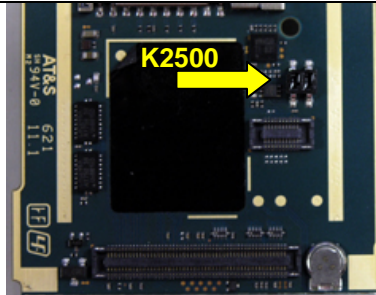
Failure	Failure Symptom	Repair Action	Pictures
	Navigation keyboard illumination	Replace X2500 if damaged	
	Numeric keyboard illumination	Replace X2501 if damaged	
	Display illumination	Replace X2500 if damaged	
1.10 Memory stick		Replace X2305 if damaged Replace N2305	
1.11 On/Off	Before continue please make sure you have tried to recover the phone in EMMA III with the SEPI A1 cable and by pressing 2 and 5 on the keypad and that you have followed the mechanical TSG.		
	Can't be power on, Cannot be detected on USB cable on EMMA III. Power consumption ~70mA	Log on to EMMA III as usual. Use SEPI A1 with power charger attached. Press keys 2 and 5 when you connect the phone	EMMA III RECOVERY

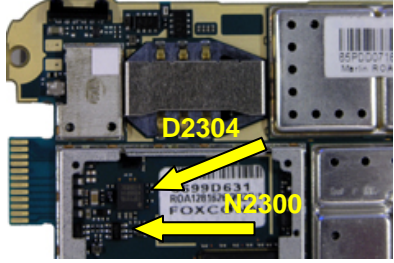
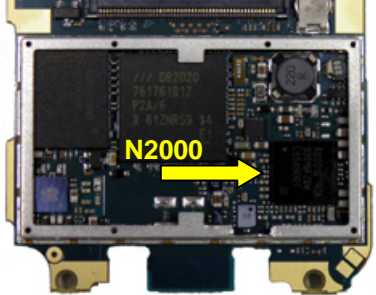
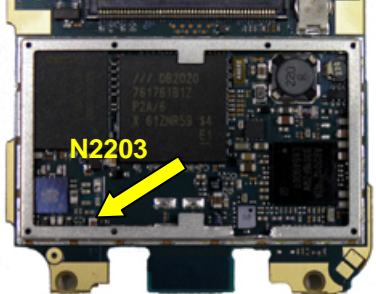
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Failure	Failure Symptom	Repair Action	Pictures
	Can't power on	Replace S2500 If damaged Replace X2200 if damaged Replace V2504 Replace N2000	 
	Turns off by itself	Replace X2200 If damaged	
	Other symptoms	Replace X2200 if damaged Replace V2504 Replace N2000	

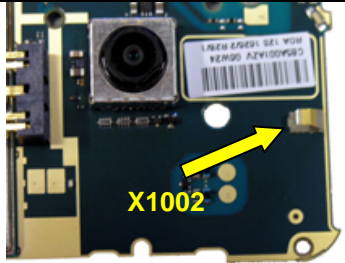
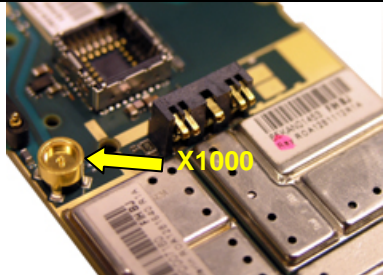
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Failure	Failure Symptom	Repair Action	Pictures
	Current draw when powered off	W850 ONLY - Replace A1300 – Approved Centers Only W830 ONLY - Replace N1100	
1.12 RTC		Replace B2100	

Failure	Failure Symptom	Repair Action	Pictures
1.13 SIM		Replace X2302 if damaged Replace N2000	
1.14 Slider	Opening the slider will not activate the display	Replace K2500	

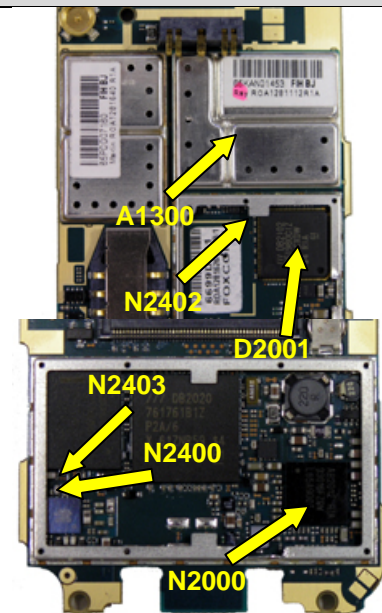
Failure	Failure Symptom	Repair Action	Pictures
1.15 USB		Replace N2300 Replace D2304	
1.16 Vibrator		Replace N2000	
1.17 FM radio		Replace N2203 Replace N2600	

2 Repair Actions for Go/No Go Test Failures

Failure	Repair Action	Pictures
Fails any part of Go/No Go testing	Run the calibration routine.	
Fails Go/No Go test, but passes calibration	Replace the antenna. Replace X1002 if damaged Rerun the phone through Go/No Go testing.	
Fails Go/No Go test after passing calibration	Change X1000 and re-test.	

3 Repair Actions for Calibration Failures

3.1 W850

Failure	Repair Action	Pictures
Fails any part of the GSM calibration routine	Replace A1300 – Approved Centers Only Replace N2400 Replace N2000	
Fails any part of the UMTS calibration routine	Replace D2001 Replace A1300 – Approved Centers Only Replace N2402	

3.2 W830

Failure	Repair Action
Fails any part of the GSM calibration routine	Replace X1002 if damaged Replace X1000 if damaged Replace N1100

3.3 Revision History

Rev.	Date	Changes / Comments
A	2006-09-21	Initial release
B	2006-10-13	Deleted components
C	2006-11-09	Deleted component N2403
D	2006-11-10	Added support for W830
E	2006-12-04	Added component V2504
F	2007-03-20	Removed component A1200
G	2007-05-24	Added N4100
H	2007-06-12	Added N2202, N2203, N2204, N3100
J	2007-12-03	Added N2600, D3100, D3101 and N2305