



Troubleshooting Guide

- electrical -



Cedar
J108i, J108a



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1 Troubleshooting Flow

For information about troubleshooting and optional troubleshooting equipment, refer to the 'Generic Repair Manual – electrical', section 'Troubleshooting Directions'!

1.1 Display

Symptom:	Display problem
Replace:	X2403 if damaged Vision check Pin 1-19 Z4200 , Z4201 or Z4202

1.2 Illumination

Symptom:	No Display illumination
Replace:	X2403 if damaged Vision check Pin 20 and 22 L4200 if more than 1 Ohm C4206 if short circuit N4200

Symptom:	No Numeric keyboard illumination
Replace:	V4203 or V4204 if no left side illumination V4205 or V4206 if no right side illumination

Symptom:	No Navigation keyboard illumination
Replace:	V4207 or V4208



Troubleshooting Flow

1.3 Keys and Sensors

Symptom:	Off key problems
Replace:	V2475
Symptom:	Numeric keyboard problems
Replace:	V2401 , V2403 , V2412 or V2413 if short circuit
Symptom:	Volume Up Key problems
Replace:	S2402 if damaged V2409
Symptom:	Volume Down Key problems
Replace:	S2403 if damaged V2410

1.4 Alert / RTC

Symptom:	The clock gain or lose time. SERP calibrating are performed
Action:	B2100



Troubleshooting Flow

1.5 Audio

Symptom:	No Microphone
Replace:	L3106 or L3107 if more than 2 Ohm R3112 or V3101 if short circuit B3101
Symptom:	No Earphone
Replace:	L3104 or L3105 if more than 1 Ohm
Symptom:	No or bad Loudspeaker
Replace:	L3108 or L3109 if more than 1 Ohm V3102 if short circuit N3100
Symptom:	No Hands-free (PHF) Aux Microphone
Replace:	X3104 if damaged (but escalate it to higher service level if it is undefiled) L2401 if more than 2 Ohm N3101
Symptom:	No Hands-free (PHF) Aux Earphone
Replace:	X3104 if damaged (but escalate it to higher service level if it is undefiled) L2400 , L2404 or L3303 if more than 2 Ohm N3101
Symptom:	No Microphone and no Earphone .Phone stuck in PHF mode when PHF is not attached
Replace:	N3101
Symptom:	No Hands-free (PHF) audio .Phone not recognizes PHF set
Replace:	X3104 if damaged (but escalate it to higher service level if it is undefiled) N3101
Symptom:	No or bad FM Radio
Replace:	X3104 if damaged (but escalate it to higher service level if it is undefiled) N1300 V2402



Troubleshooting Flow

1.6 On/Off

Symptom: Current draw greater than 300 mAmps in standby mode

Replace: **N300** or **N400** if getting hot
N420 if getting hot (Band 2 and 5)
N2420 if getting hot

Symptom: Current draw when powered off

Replace: **N400**
N420 (Band 2 and 5)
N2420

Symptom: Draws current when On/Off key is pressed, returns to zero

Replace: **L2200** if more than 1 Ohm
N2208
B2100
N1211 , **N300** or **B300**

Symptom: Other

Replace: **X2200** if damaged

1.7 Charging/Capacity

Symptom: No or bad Charging

Replace: **X2200** or **X2201** if damaged
C2406 or **V2200** if short circuit
N2200

Troubleshooting Flow

1.8 SIM

Symptom:	SIM not detected	vision check all pins
Replace:	X2404 if damaged	

1.9 Camera

Symptom:	Camera problems	
Replace:	X4300 if damaged N4301	vision check all pins

1.10 Data Communication

Symptom:	No communication via the USB Connector
Action:	if not charging via USB go to Charging problems
Replace:	X2201 if damaged R2441 or R2444 if more than 33 Ohm N2420

Symptom:	No or bad Bluetooth connection
Replace:	Z1300 N1300

1.11 Micro SD card

Symptom:	Card not detected
Replace:	X2401 if damaged N2400



Troubleshooting Flow

1.12 Network/Signal

Symptom:	Phone fails to lock on to network during radiated (wireless) Go / No Go test
Action:	Use RF probe to perform conducted Go / No Go test
Symptom:	Phone passes conducted (RF cable) Go / No Go test but fails radiated (wireless) Go / No Go test
Check:	X1201 or X1202 for damage and replace if necessary
Check:	X1200 for damage and replace if necessary
Replace:	Antenna
Action:	Rerun the phone through radiated (wireless) Go/No Go testing
Symptom:	Phone fails conducted (RF probe) Go / No Go test
Replace:	Run the calibration routine
Symptom:	Fails conducted (RF probe) Go/No Go test, but passes calibration
Replace:	Rerun the phone through Go/No Go testing
Symptom:	Fails any part of the calibration routine
Replace:	X1200 if damaged N1211 , N200 , N300 or B300 if GSM fault L1200 if UMTS fault and L1200 is more than 1 Ohm N1210 , N200 , N300 or N420 if UMTS band 1 fault N1210 , N200 , N300 or N400 if UMTS band 2 or 5 fault



Revision History

Rev.	Date	Changes / Comments
1	2010-09-21	Initial release
2	2011-02-22	Update repair level
3	2012-02-01	Update Chapter 1.5