



Sony Ericsson

Troubleshooting Guide

- electrical -



C901



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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: **X4203** if damaged

1.2 Illumination

Symptom: No Display illumination
Replace: **X4203** if damaged
L4200 if more than 2 Ohm
V4200, V4201 or V4203

Symptom: No Upper and Lower White keys illumination
Replace: **X2410** if damaged
N4400

Symptom: No Keyboard blue keys illumination
Replace: **X2410** if damaged
N4400

Symptom: No Camera Ring Blue LEDs
Replace: **X4400** if damaged
N4400

Symptom: No Auto Focus LED
Replace: **X4400** if damaged
N4400

Symptom: No Tally LED
Replace: **X4400** if damaged
N4400

Symptom: No Flash LED
Replace: **X4400** if damaged
N4400



Troubleshooting Flow

1.3 Keys and Sensors

Symptom: Numeric keyboard problems

Replace: **X2410** if damaged

Symptom: Navigation keys problems

Replace: **X2410** if damaged

Symptom: Camera key problems

Replace: **X2410** if damaged

Symptom: Camera Play key problems

Replace: **X2410** if damaged

Symptom: Camera Rec key problems

Replace: **X2410** if damaged

Symptom: Volume up key problems

Replace: **X2401** if damaged

Symptom: Volume down key problems

Replace: **X2401** if damaged

Symptom: Opto Sensor problems

Replace: **N4200** or **N2201**

Symptom: Camera Cover Sensor problems

Replace: **X4400** if damaged

Symptom: Accelerometer problems

Replace: **N2411**

1.4 Alert / RTC

Symptom: Vibrator problems

Replace: **X2401** if damaged

Symptom: The clock gain or lose time. SERP calibrating is performed

Replace: **B2100**

Symptom: The clock has to be set after the battery has been detached

Replace: **C2214**

Troubleshooting Flow

1.5 Audio

Symptom: No Microphone

Replace: **B3105** if damaged

Symptom: No Earphone

Replace: **X2401** if damaged

Symptom: No or bad Loudspeaker

Replace: **V3101** or **N3100**

Symptom: No Hands-free (PHF) Aux Microphone

Replace: **L2401** or **L2402** if more than 2 OHM
N3101

Symptom: No Hands-free (PHF) Aux Earphone

Replace: **L2403**, **L2404** or **L2406** if more than 2 OHM
N3101

Symptom: No Microphone and no Earphone .Phone stuck in PHF mode when PHF is not attached

Replace: **V2417** if short circuit
N2422

Symptom: No Hands-free (PHF) audio .Phone not recognizes PHF set

Replace: **N2422**

Symptom: No FM Radio

Replace: **L2408** if more than 2 Ohm
N1300



Troubleshooting Flow

1.6 On/Off

Symptom: Current draw greater than 300 mAmps

Replace: **N1200** if module getting hot

Symptom: Current draw when powered off

Replace: **N1200**

Symptom: Using no current when On/Off key is pressed and will not start. Starts when charger is inserted

Replace: **X2410** if damaged

Symptom: Hangs at gray display. Constant vibration. Will not power off

Replace: **B2100**

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

Replace: **L2200** if more than 1 Ohm

L2201 if more than 1 Ohm

N2215

N1211

N1200

Symptom: Will not power off

Replace: **V2470**

Symptom: Other

Replace: **X2201** if damaged

1.7 Charging/Capacity

Symptom: No Charging from power outlet

Replace: **X2201** if damaged,

V2200 or **V2412** if short circuit

V2202

Symptom: No Charging from computer via USB

Replace: **N2421**

Symptom: The Clock has to be set after the battery has been detached.

Replace: **C2214**



Troubleshooting Flow

1.8 SIM

Symptom: SIM not detected

Replace: **X2402** if damaged

1.9 Camera

Symptom: Main Camera problems

Replace: **X4300** if damaged
N2205, N2206, N2213 or N2214

1.10 Data Communication

Symptom: No communication via the System Connector

Replace: **N2421** if not charging via USB
V2415 if pin10 at X2405 System connector are short circuit to GND
V2416 if pin11 at X2405 System connector are short circuit to GND
Z2400 or N2420

Symptom: Bluetooth problems

Replace: **X1100 and X1101** if damaged
N1300

1.11 Memory Stick

Symptom: Memory stick not detected

Replace: **X2401** if damaged



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: **X1210, E1002, E1003, E1004, E1005, E1006, E1007** and **E1008** for damage and replace if necessary

Check: **X1200** for damage and replace if necessary

Replace: **Main 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 or **N1200** if GSM fault

N1210 or **N1200** if UMTS fault



2 Revision History

Rev.	Date	Changes / Comments
1	2009-May-28	First version