



Sony Ericsson

Troubleshooting Guide

- electrical -



W705
W715

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1 Troubleshooting Flow

1.1 Display

Symptom: Display problem

Replace: **X4200**, if damaged
Z4200, Z4201 or Z4202

Troubleshooting Flow

1.2 Illumination

Symptom: No Display illumination

Replace: **X4200**, if damaged
L4200, if more than 1 Ω
V4203
N2401

Symptom: No Navigation keys illumination

Replace: **X4200**

Symptom: No Walkman LED

Replace: **X4200**

Symptom: No Numeric keyboard illumination

Replace: **X2401**, if damaged

Symptom: No Web short cut LED

Replace: **X2401**, if damaged

Symptom: No Tally LED

Replace: **X2402**, if damaged

Symptom: No Flash LED

Replace: **X2402**, if damaged

Symptom: No Trickle Charge LED

Replace: **X4200**, if damaged

Troubleshooting Flow

1.3 Keys & Sensors

Symptom: Numeric keyboard problems

Replace: **X2401**, if damaged

Symptom: Navigation keys problems

Replace: **X4200**, if damaged

Symptom: Camera key problems

Replace: **S2403**

Symptom: Walkman key problems

Replace: **S2404**

Symptom: Volume up key problems

Replace: **S2406**

Symptom: Volume down key problems

Replace: **S2405**

Symptom: Opto Sensor problems

Replace: **X4200**, if damaged
N2201

Symptom: Slide Sensor problems

Replace: **B4410**, if damaged

Symptom: Accelerometer problems

Replace: **N2411**

Troubleshooting Flow

1.4 Alert & RTC

Symptom: Vibrator problems

Replace: **B2000**

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: **B3100**

Symptom: No Earphone

Replace: **X4200**, if damaged

Symptom: No or bad Loudspeaker

Replace: **X3102**, if damaged

V3101

N3100

Symptom: No Hands-free (PHF) Aux Microphone

Replace: **X2405**, if damaged

L2401 or **L2402**, if more than 2 Ω

N3101

Symptom: No Hands-free (PHF) Aux Earphone

Replace: **X2405**, if damaged

L2403, **L2404**, **L2405**, **L2406** or **L2408**, if more than 2 Ω

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: **X2405**, if damaged

N2422

Symptom: No FM Radio

Replace: **X2405**, if damaged

R2451, if more than 1 Ω

N1300

Troubleshooting Flow

1.6 On/Off

Symptom: Current draw greater than 300 mA

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: **X4200**, 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 Ω

L2201

N2200

N1211

N1200

Symptom: Will not power off

Replace: **V2470**

Symptom: Other

Replace: **X2201**, if damaged

Troubleshooting Flow

1.7 Charging & Capacity

Symptom: No Charging from power outlet

Replace: **X2405** or **X2201**, if damaged
V2200, if short circuit
R2490, if more than 1 Ω
V2202

Symptom: No Charging from computer via USB

Replace: **X2405**, if damaged
L2452, if more than 1 Ω
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

Troubleshooting Flow

1.9 Camera

Symptom: Main and VGA Camera problems

Replace: **N2203** or **N2204**

Symptom: Main Camera problems

Replace: **X4300**, if damaged

Symptom: VGA Camera problems

Replace: **X4200**, if damaged

Troubleshooting Flow

1.10 Data Communication

Symptom: No communication via the System Connector

Replace: **X2405**, if damaged
N2421, if not charging via USB
V2415, if pin11 at X2405 is short circuit to GND
V2416, if pin10 at X2405 is short circuit to GND
Z2400
N2420

Symptom: Bad Bluetooth and W-LAN connection

Replace: **X1500**
N1510

Symptom: No Bluetooth connection

Replace: **N1300**

Symptom: No W-LAN connection

Replace: **N2300**

Symptom: No GPS connection

Replace: **N1410** (W715 only)
B1400 (W715 only)
N1400 (W715 only)

Troubleshooting Flow

1.11 Memory Stick

Symptom: Memory stick not detected

Replace: **X2403**, if damaged

Troubleshooting Flow

1.12 Network & Signal

Symptom: Phone fails to lock on to network during radiated (wireless) Go/NoGo test

Replace: Use RF probe to perform conducted Go/NoGo test

Symptom: Phone passes conducted (RF cable) Go/NoGo test but fails radiated (wireless) Go/NoGo test

Check: **X1000**, **X1001**, **X1002**, **X1003**, **X1004** and **X1005** for damage and replace, if necessary
X1200 for damage and replace, if necessary

Replace: Antenna frame

Action: Rerun the phone through radiated (wireless) Go/NoGo testing

Symptom: Phone fails conducted (RF probe) Go/NoGo test

Action: Run the calibration routine

Symptom: Fails conducted (RF probe) Go/NoGo test, but passes calibration

Action: Rerun the phone through Go/NoGo testing

Symptom: Fails any part of the calibration routine

Replace: **X1200**, if damaged
N1200, if GSM fault
N1200 or **N1210**, if UMTS fault



2 Revision History

Rev.	Date	Changes / Comments
1	2009-Feb-25	Initial release
2	2009-Jun-09	L2452 added to 1.7 Charging & Capacity