



Sony Ericsson

# Troubleshooting Guide

## - electrical -



**G705**

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**For general information about troubleshooting, refer to  
1220-1336: Generic Repair Manual - electrical**



# 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  $\Omega$   
**V4203**  
**N2401**

**Symptom:** No Navigation keys illumination

**Replace:** **X4200**

**Symptom:** No Navigation Orange 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 / Play and Stop button 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  $\Omega$

**N3101**

**Symptom:** No Hands-free (PHF) Aux Earphone

**Replace:** **X2405**, if damaged

**L2403**, **L2404**, **L2405**, **L2406** or **L2408**, if more than 2  $\Omega$

**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  $\Omega$

**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  $\Omega$

**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  
**R2449** or **R2490**, if more than 1  $\Omega$   
**V2202**

**Symptom:** No Charging from computer via USB

**Replace:** **X2405**, if damaged  
**L2452**, if more than 1  $\Omega$   
**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** (G705 only)  
**B1400** (G705 only)  
**N1400** (G705 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	2008-Nov-06	Initial release
2	2009-Feb-02	Walkman LED changed to Navigation Orange LED Walkman KEY changed to Walkman/Play and Stop button