



Sony Ericsson

Troubleshooting Guide

- electrical -



Mix, WT13i

CONTENTS

1	Troubleshooting Flow	3
1.1	Display	3
1.2	Touch	4
1.3	Illumination	5
1.4	Keys & Sensors	6
1.5	Alert & RTC	7
1.6	Audio	8
1.7	On/Off	9
1.8	Charging & Capacity	10
1.9	SIM.....	11
1.10	Camera	12
1.11	Data Communication.....	13
1.12	Memory Stick	14
1.13	Network & Signal	Error! Bookmark not defined.
2	Revision History	16



1 Troubleshooting Flow

1.1 Display

Symptom: Display problem

Replace: **J502**, if damaged, visual check pin 5-19
U504, U505 or U506



Troubleshooting Flow

1.2 Touch

Symptom: Touch Screen problems

Replace: **J503**, if damaged
U502



Troubleshooting Flow

1.3 Illumination

Symptom: No Display illumination

Replace: **J502**, if damaged, visual check pin 21-26

Symptom: No ZAP LED

Replace: **LED704**, if damaged
Q709

Symptom: No Walkman LED

Replace: **LED703**, if damaged
Q709

Symptom: No Home key LED

Replace: **D710**, if short circuit
D708, if damaged

Symptom: No Pre-charge Charge LED

Replace: **LED701**, if damaged
Q708



Troubleshooting Flow

1.4 Keys & Sensors

Symptom: Power/Lock Key problems

Replace: **SW704**, if damaged

Symptom: Camera Key problems

Replace: **SW703**, if damaged

Symptom: Volume Up key problems

Replace: **SW701**, if damaged

Symptom: Volume Down key problems

Replace: **SW702**, if damaged

Symptom: Walkman key problems

Replace: **SW708**, if damaged

Symptom: ZAP key problems

Replace: **SW707**, if damaged

Symptom: Home KEY problems

Replace: **D705**, if damaged

Symptom: Proximity sensor

Replace: **D703**, if damaged

Q701

U702

Symptom: Accelerometer problems

Replace: **U701**



Troubleshooting Flow

1.5 Alert & RTC

Symptom: Vibrator problems

Replace: **J702**, if damaged
Q708

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

Replace: **BAT201**

Note: **Phone has not the BAT201 (Tan capacitor) after production week 12W05.**
Details refer to SI: 18953-94505 (Tantalum capacitor removal)



Troubleshooting Flow

1.6 Audio

Symptom: No Microphone

Replace: **J601**, if damaged
D601 or **D613**, if short circuit

Symptom: No or bad Earphone / Ear speaker

Replace: **D606** or **D607**, if short circuit

Symptom: No or bad Loudspeaker_UP

Replace: **J602** or **J603**, if damaged
D602 or **D603**, if short circuit

Symptom: No or bad Loudspeaker_ Down

Replace: **J604** or **J605**, if damaged
D604 or **D605**, if short circuit

Symptom: No or bad Hands-free (PHF) Microphone

Replace: **J606** , if damaged
D609, if short circuit

Symptom: No or bad Hands-free (PHF) Aux Earphone / Ear speaker

Replace: **J606**, if damaged
D610 or **D611**, if short circuit

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

Replace: **J606**, if damaged
D608, if short circuit

Symptom: No or bad FM Radio

Replace: **J606**, if damaged
D612, if short circuit



Troubleshooting Flow

1.7 On/Off

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

Replace: **J402**, if damaged
D401 or **D402**, if short circuit
SW704, if damaged



Troubleshooting Flow

1.8 Charging & Capacity

Symptom: No Charging from power outlet

Replace: **J402**, if damaged

D401 or **D402**, if short circuit

J403, if damaged , visual check pin 1,5

U401

U202



Troubleshooting Flow

1.9 SIM

Symptom: SIM not detected

Replace: **J401**, if damaged
D403, if short circuit



Troubleshooting Flow

1.10 Camera

Symptom: Camera problems

Replace: **J501**, if damaged

RN501, **RN502** or **RN503**, if damaged

U503



Troubleshooting Flow

1.11 Data Communication

Symptom: No communication via the USB Connector

Replace: **J403**, if damaged, visual check pin 2,3

FL401

U401

Symptom: No or bad Bluetooth and WLAN connection

Replace: **J1001**, if damaged



Troubleshooting Flow

1.12 Memory Stick

Symptom: Memory Card (micro SD) not detected

Replace: **J405**, if damaged, visual check all pins

D411, D412, D413, D414, D415 or **D416**, if short circuit

D408, if short circuit

U402

Troubleshooting Flow

1.13 Network & Signal

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

Action: 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: **Z901, Z902, Z903**, for damage and replace, if necessary
J901, if the resistance between pin1 and 2 is higher than 1 ohm

Replace: Rear Cover Assy

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

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

Action: Scrap the PBA.



2 Revision History

Rev.	Date	Changes / Comments
1	2011-Aug-05	Initial release
2	2012-Jan-31	Modify chapter 1.5