

Service Repair Documentation Level 2.5 - S65





Release	Date	Department	Notes to change
1.0	04.08.2004	ICM MP CCQ GRM T	New document
1.1	25.11.2004	ICM MP CCQ GRM T	MMC Melting Problem

Company Confidential Copyright 2004© Siemens AG



Introduction

This Service Repair Documentation is intended to carry out repairs on Siemens repair level 2.5. The described failures shall be repaired in Siemens authorized local workshops only.

All repairs have to be carried out in an ESD protected environment and with ESD protected equipment/tools. For all activities the international ESD regulations have to be considered.

Assembling/disassembling has to be done according to the latest S65 Level 2 repair documentation. It has to be ensured that every repaired mobile Phone is checked according to the latest released General Test Instruction document (both documents are available in the Technical Support section of the C-market).

Check at least weekly C-market for updates and consider all S65 related Customer Care Information

CX65 Partnumber on IMEI label: S30880-S7400-#xxx

, while # may be any letter (A-Z) and xxx may be any number from 100, 101, 102....

Scrap Handling: All Scrap information given in this manual are related to the SCRAP-Rules and instructions.

If you have any questions regarding the repair procedures or technical questions spare not hesitate to contact our technical support team in Kamp-Lintfort, Germany:

Tel.: +49 2842 95 4666 Fax: +49 2842 95 4302

e-mail: st-support@klf.siemens.de

Company Confidential Copyright 2004© Siemens AG



Table of Content

1	S65 board layout	4
•		
2	Connector SIM Card Reader	5
3	Connector IO Jack	6
4	Connector Board to Board	8
5	Connector Battery	9
6	Connector MMC	10
7	Connector RF	11
8	Connector Camera	12
9	Connector Display	13
10	IRDA	14
11	JOYSTICK	15

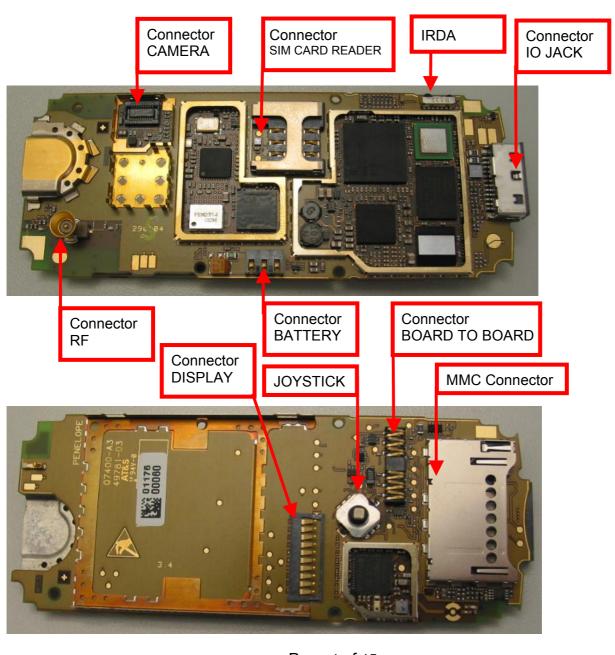
Copyright 2004© Siemens AG



1 S65 board layout

Jigs, Tools and Working materials for all described repairs:

- hot air blower
- soldering gun
- tweezers
- flux
- solder

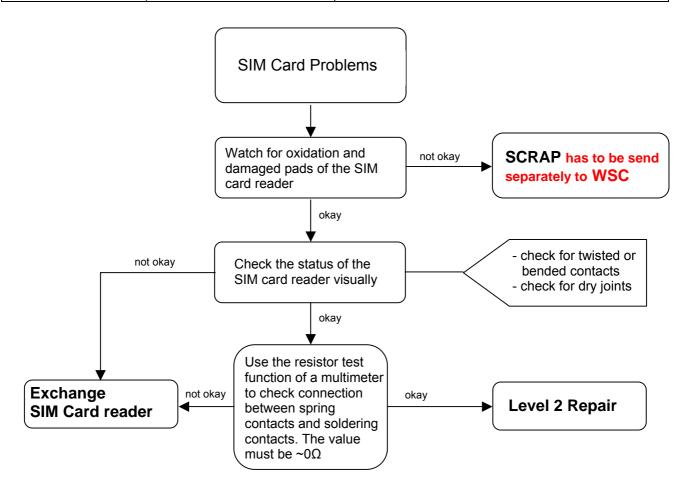


Page 4 of 15



2 Connector SIM Card Reader

Fault Symptoms		
Customer:	GRT:	
Handset does not accept SIM card	SIM Card Problems	



Connector SIM Card Reader

Use soldering iron to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

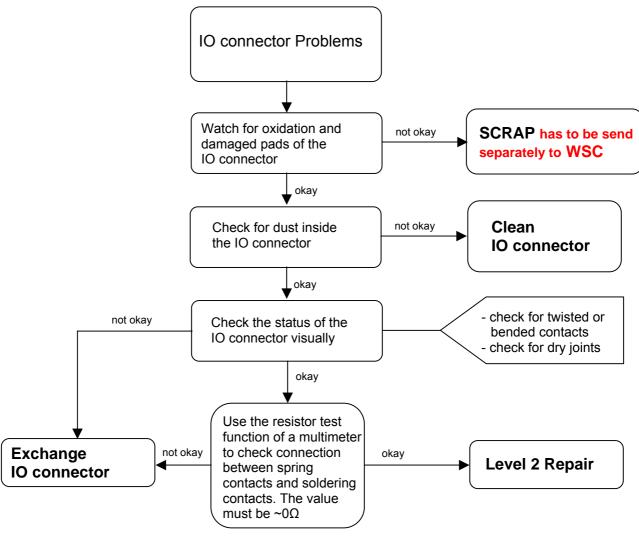
E-commerce order number: L36334-Z97-C337 Soldering temperature: 240 - 255°C

IRIS Diagnose Code: 43300 Interface/SIM Cardreader/Mechanical Damage



3 Connector IO Jack

Fault Symptoms Customer: GRT: Charging Problems Problems with external loudspeaker or microphone when using a car kit Problems with accessories connected at the IO connector GRT: No connection to GRT Tbd.



Connector IO Jack

Use soldering iron to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L36334-Z93-C303 Soldering temperature: 240 - 255°C

IRIS Diagnose Code: 46100 Interface/Charging Connector/Mechanical Damage

47300 Interface/Data Interface/Mechanical Damage 4B100 Interface/Headset Connector/Mechanical Damage



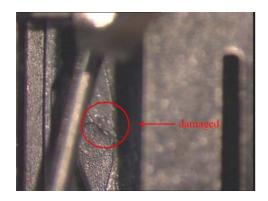
Important additional soldering hints

The MMC Reader is located on the opposite of the SLIM-Lumberg connector. Therefore the risk to damage the plastic material of this MMC-Reader is potentially high if excessive heat is used while removal or soldering of the SLIM-Lumberg connector.

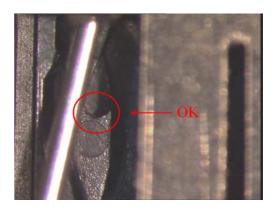
Please follow this instructions:

- a) Remove the SLIM-Lumberg connector with a soldering iron and Desolder Wick
- b) Clean the Pads afterwards
- c) Solder the new connecter by using soldering iron under consideration of the max. allowed temperature range.

Samples of critical area:



Lock mechanism damaged

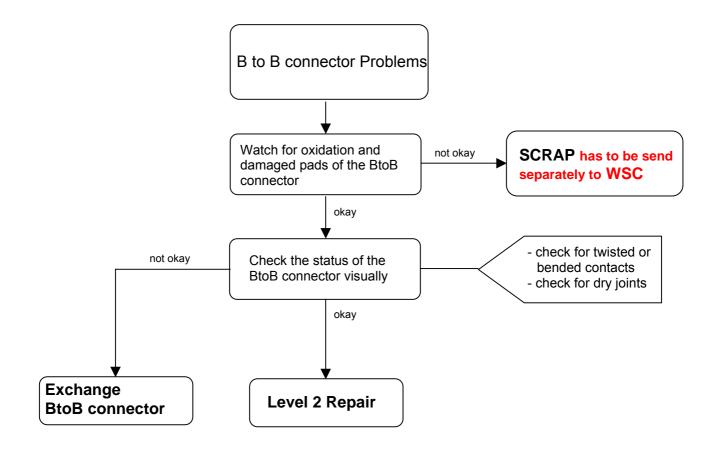


Lock mechanism OK



4 Connector Board to Board

Fault Symptoms		
Customer:	GRT:	
Keyboard malfunction	Keyboard malfunction	
Keypad illumination does not work	Tbd.	



Connector Board to Board

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L36334-Z97-C346 Soldering temperature: 240 - 255°C

IRIS Diagnose Code: 32100 Keys / Main / No Function

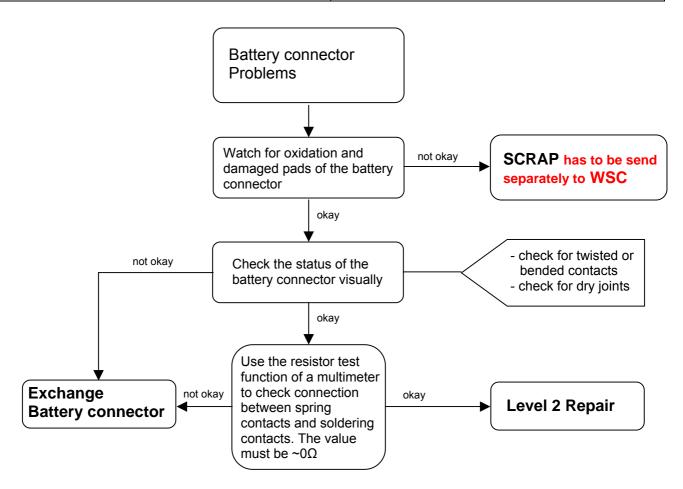
32200 Keys / Main / Reduced Functionality

36000 Keys / Illumination



5 Connector Battery

Fault Symptoms		
Customer:	GRT:	
Mobile does not switch on	No connection to GRT	



Connector BATTERY

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L36334-Z97-C213 Soldering temperature: 240 - 255°C

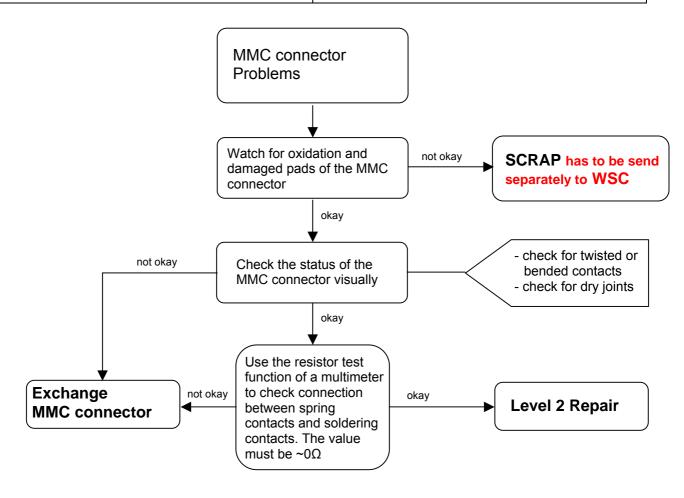
IRIS Diagnose Code: 13000 Battery/Mechanical Damage

Copyright 2004© Siemens AG



Connector MMC

Fault Symptoms		
Customer:	GRT:	
MMC malfunction	Tbd.	



Connector MMC

Use soldering iron to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

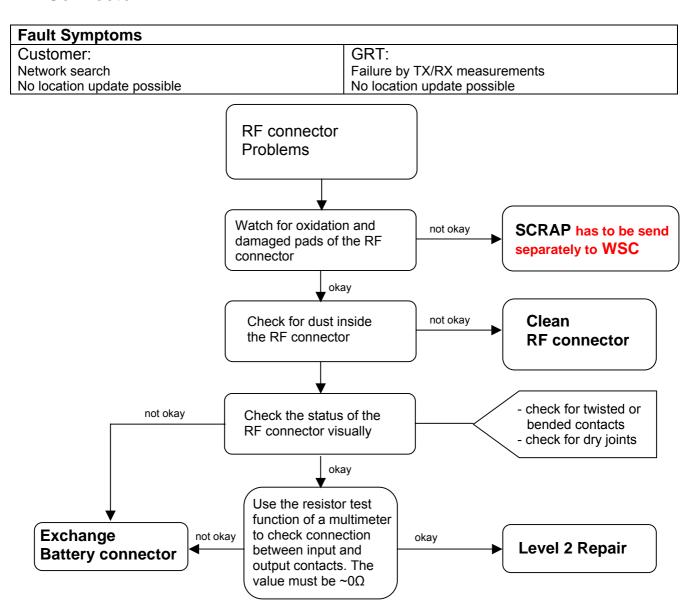
E-commerce order number: L36334-Z97-C342 Soldering temperature: 240 - 255°C

IRIS Diagnose Code: B1120 Accessories / Memory / MMC / Defect

Attention: Avoid excessive heat in order not to damage the plastic material of the connector (see problem SLIM-Lumberg connector)



7 Connector RF



Connector RF

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L36334-Z93-C297 Soldering temperature: 240 - 255°C

IRIS Diagnose Code:

81100 Radio / No Contact / Int. Antenna 81200 Radio / No Contact / Ext. Antenna

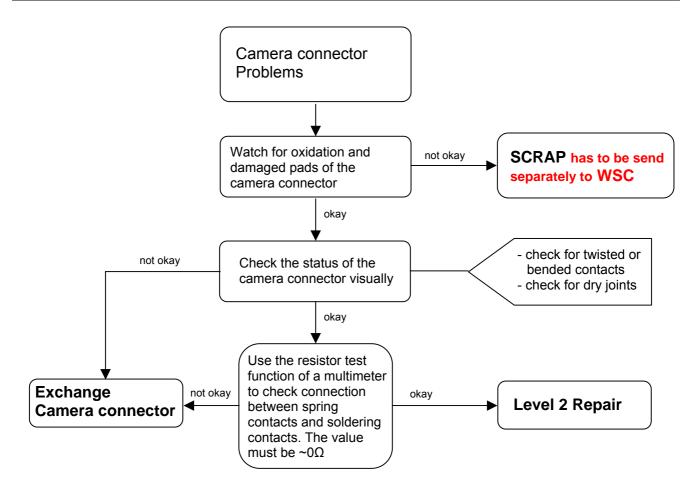
82100 Radio / Low Receiving Signal / Int. Antenna 82200 Radio / Low Receiving Signal / Ext. Antenna

83100 Radio / Dropped Calls / Int. Antenna 83200 Radio / Dropped Calls / Ext. Antenna 84100 Radio / Call Setup / Int. Antenna 84200 Radio / Call Setup / Ext. Antenna



8 Connector Camera

Fault Symptoms		
Customer:	GRT:	
Camera malfunction	Tbd.	



Connector CAMERA

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

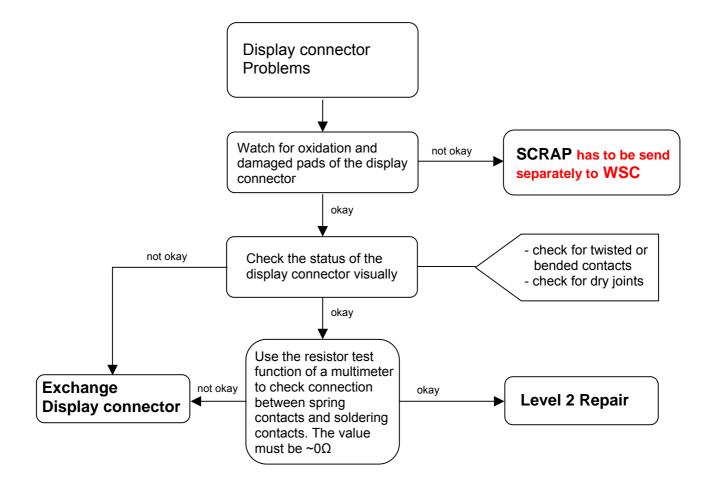
E-commerce order number: L36197-F5008-F341 Soldering temperature: 240 - 255°C

IRIS Diagnose Code: BA000 Accessories / Camera



9 Connector Display

Fault Symptoms Customer: Display problems, like missing lines or columns on the LCD or display contrast problems or illumination problems GRT: Display problems Display problems



Connector DISPLAY

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L36334-Z97-C205 Soldering temperature: 240 - 255°C

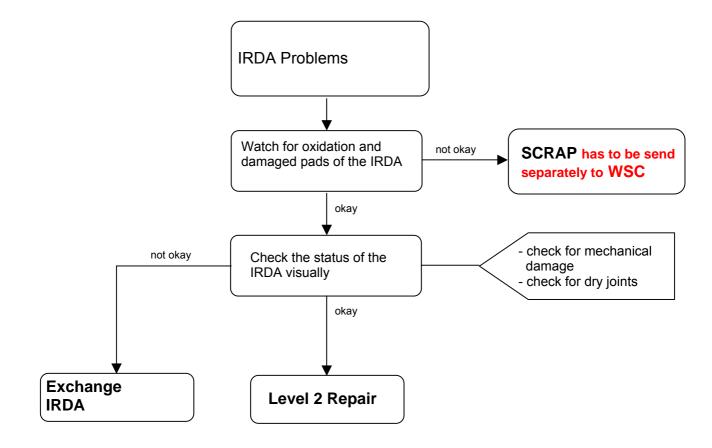
IRIS Diagnose Code: 21000 Display / Performance

22000 Display / Background Illumination



10 IRDA

Fault Symptoms	
Customer:	GRT:
No infrared connection possible	Tbd.



IRDA

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L36810-U6130-D670

Soldering temperature: 240 - 255°C

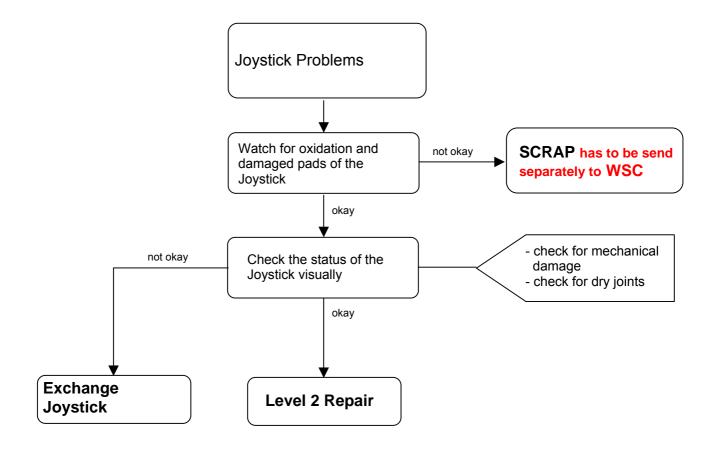
IRIS Diagnose Code: 41100 Interfaces / IRDA / No Function

41300 Interfaces / IRDA / Mechanical Damage



11 JOYSTICK

Fault Symptoms		
Customer:	GRT:	
Joystick malfunction	Tbd.	



Joystick

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L36315-Z77-C218 Soldering temperature: 240 - 255°C

IRIS Diagnose Code: 32100 Keys / Main / No Function

32200 Keys / Main / Reduced Functionality