

Service Repair Documentation

Level 2.5 light - S65, SP65



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
1.2	12.01.2005	COM MD CC GRM T	SIM Card Reader Add On
1.3	25.02.2005	COM MD CC GRM T	SP65 added

Introduction

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

The level 2.5 (former Level 2.5e) partners are obliged to repair level 2 classified boards, up to their repair level, under consideration of the information given by level 2.5 (former level 2.5e) repair instruction.

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, SP65 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, SP65 related Customer Care Information

S65 Partnumber on IMEI label: S30880-S7400-#xxx
SP65 Partnumber on IMEI label: S30880-S7450-#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@siemens.com

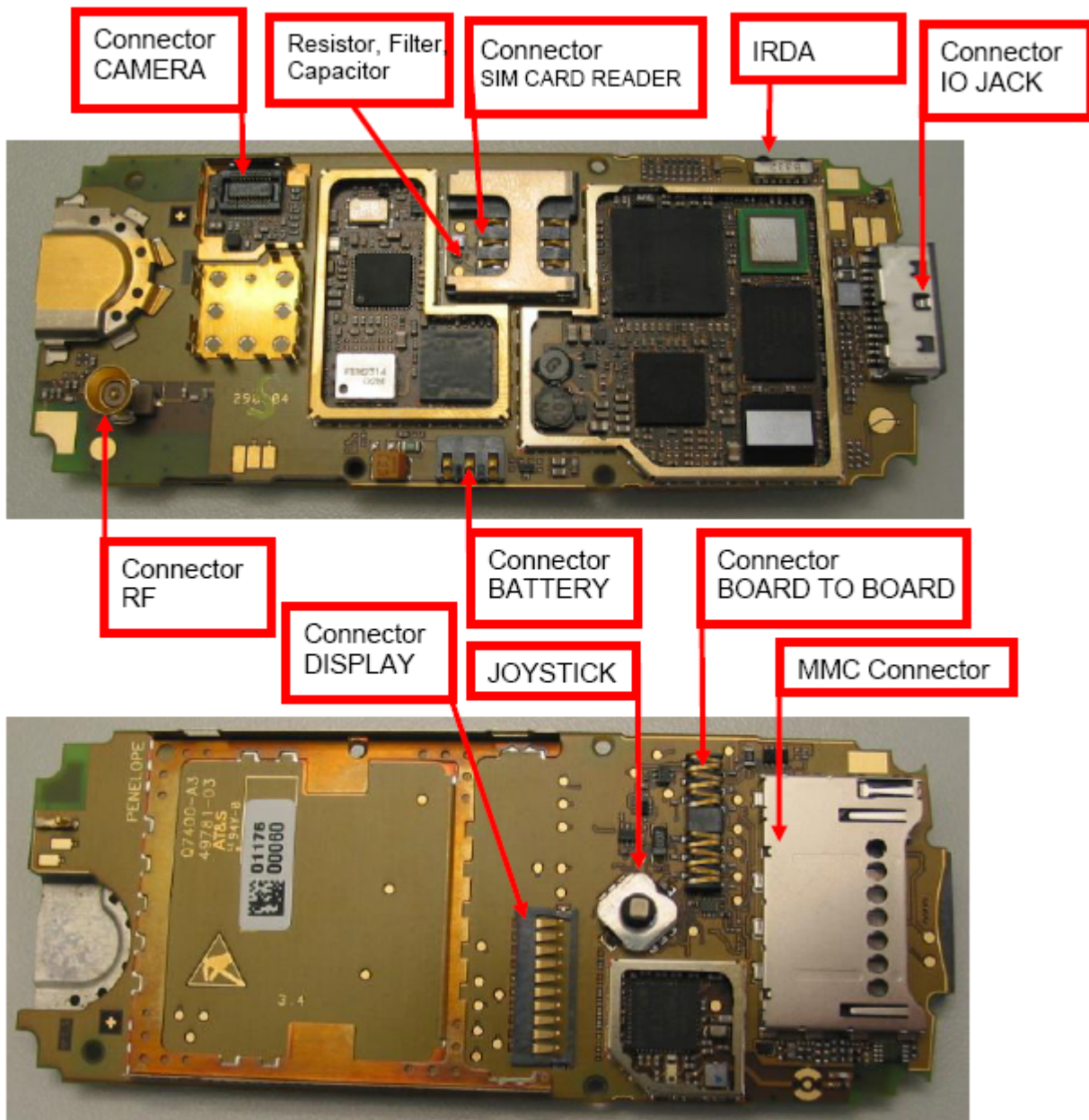
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1 S65, SP65 board layout

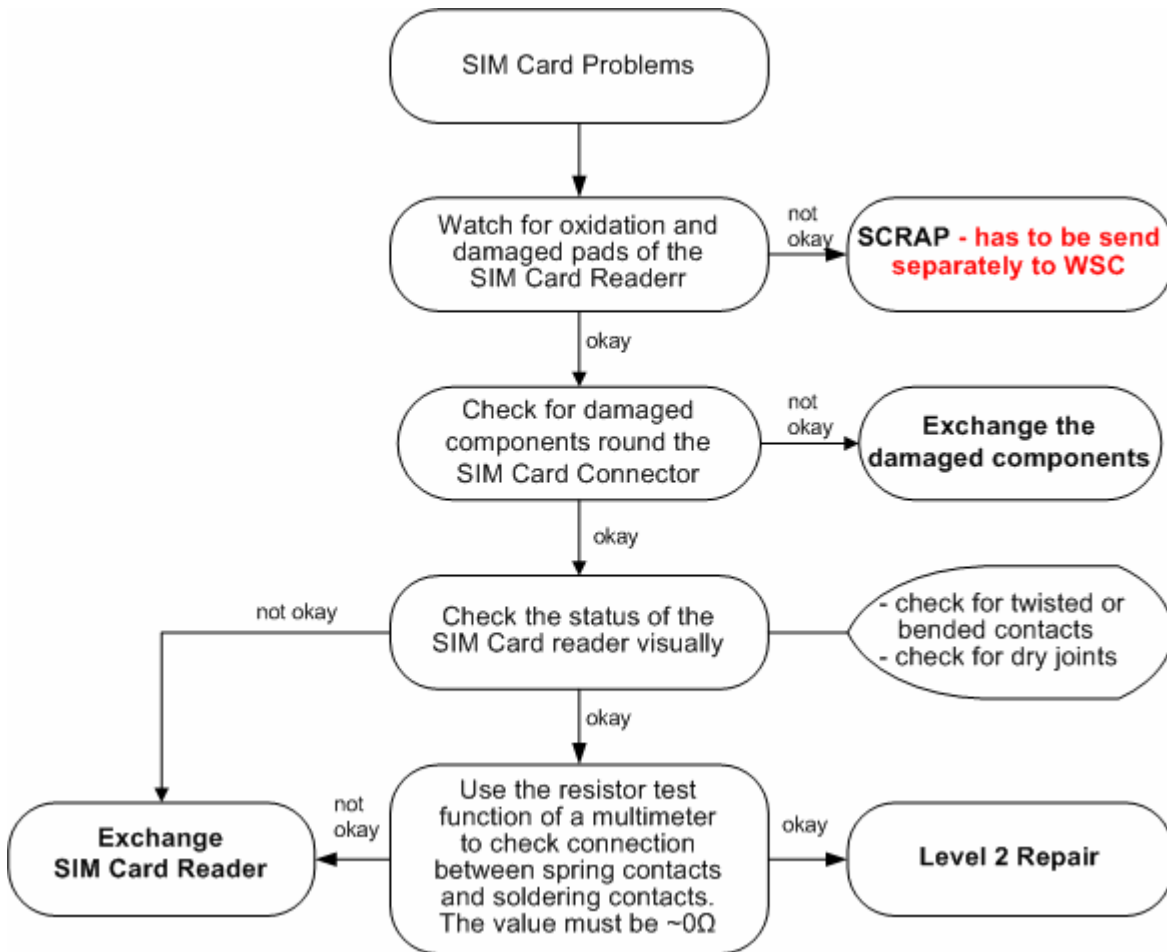
Jigs, Tools and Working materials for all described repairs:

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



2 Connector SIM Card Reader

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



Connector SIM Card Reader

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

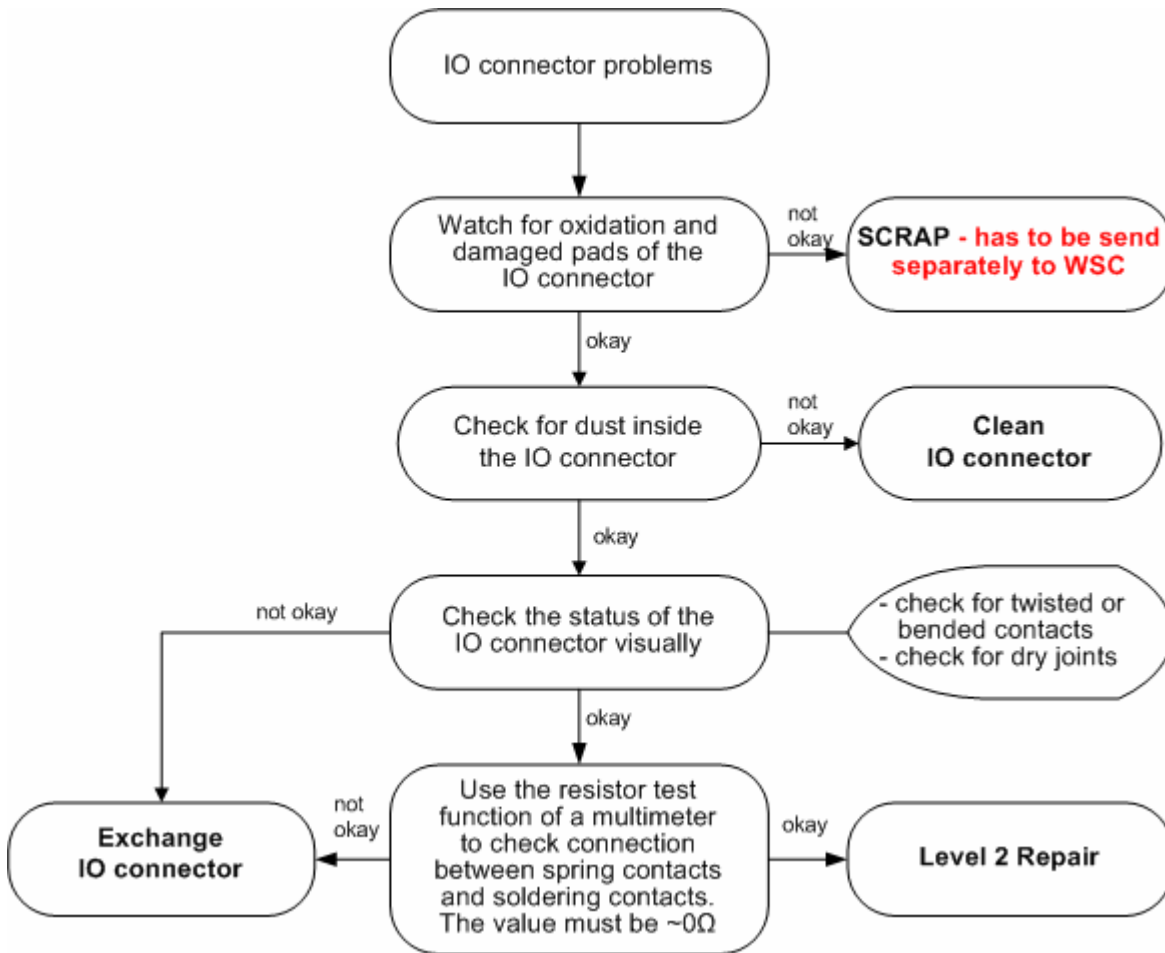
E-commerce order number: L36334-Z97-C337
Soldering temperature: 240 - 255°C
IRIS Diagnose Code: 43300 Interface/SIM Cardreader/Mechanical Damage

Surrounded Components

R1614 Resistor Res_Type8 L36842-C472-J
C1605 Capacitor Cap_Type3 L36853-C6224-M6
Z1601 Filter L50620-U6056-D670

Connector IO Jack

Fault Symptoms	
Customer: 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.

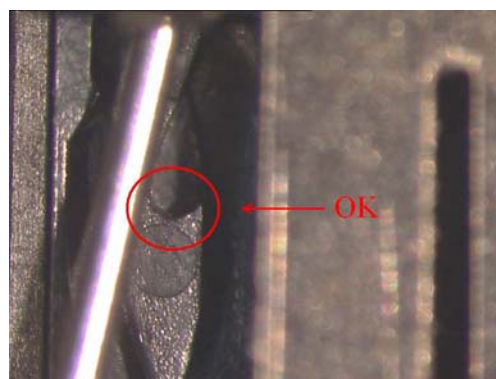
Please follow this instructions:

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

Samples of critical area:



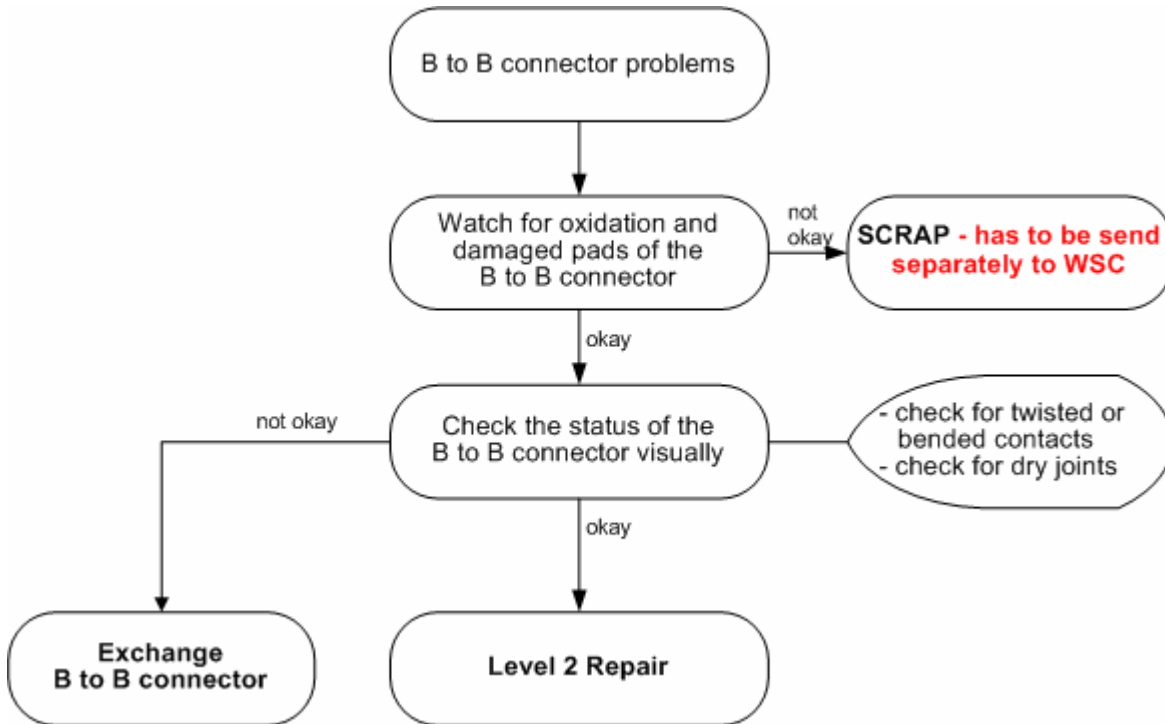
Lock mechanism damaged



Lock mechanism OK

3 Connector Board to Board

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



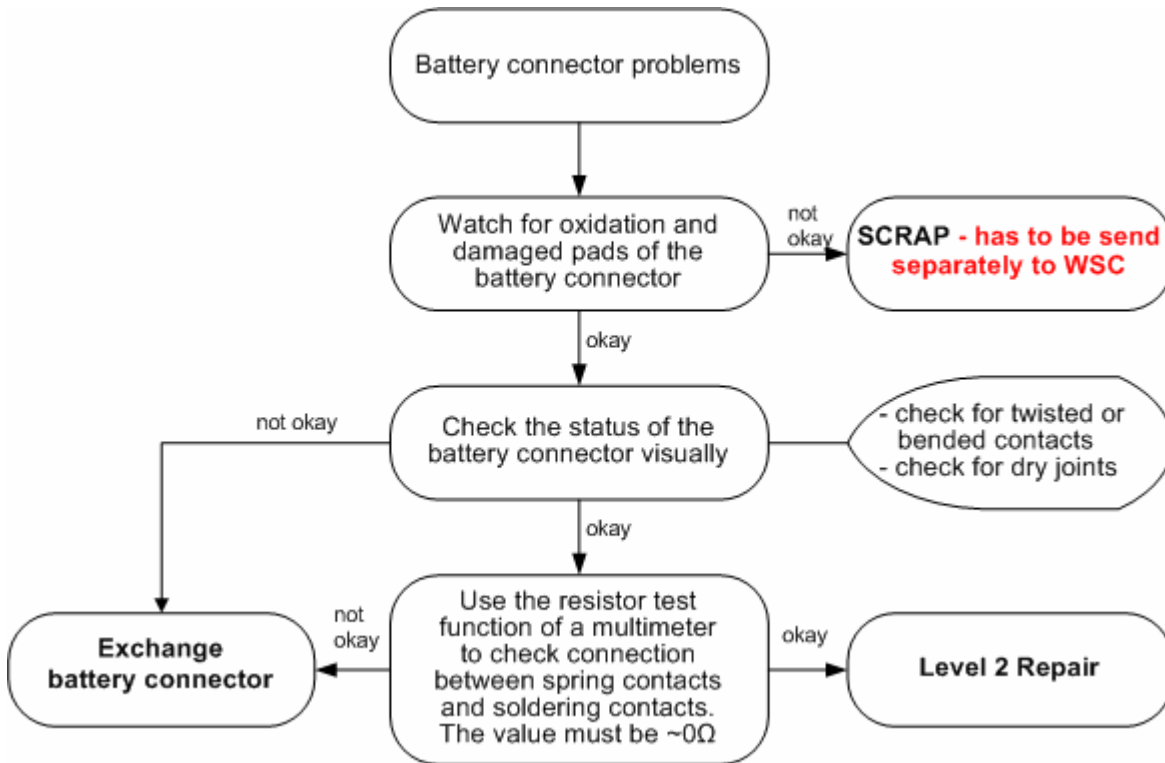
Connector Board to Board

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

4 Connector Battery

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



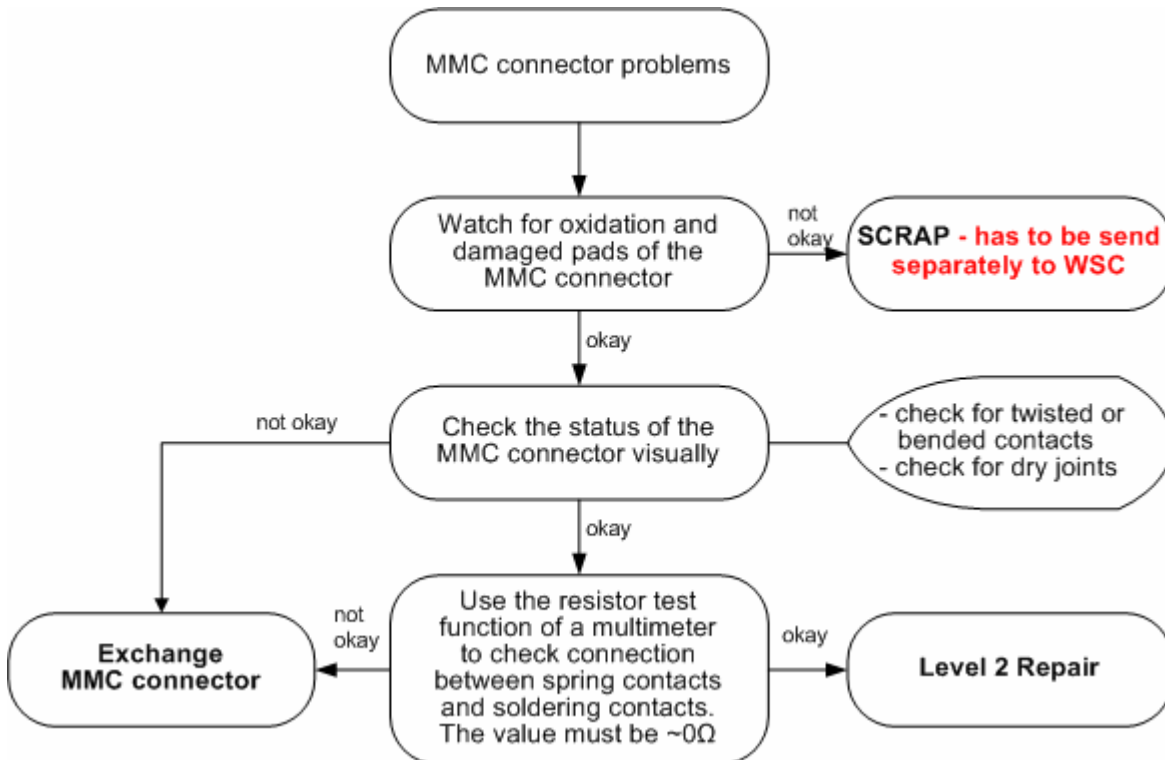
Connector BATTERY

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

5 Connector MMC

Fault Symptoms	
Customer: MMC malfunction	GRT: Tbd.



Connector MMC

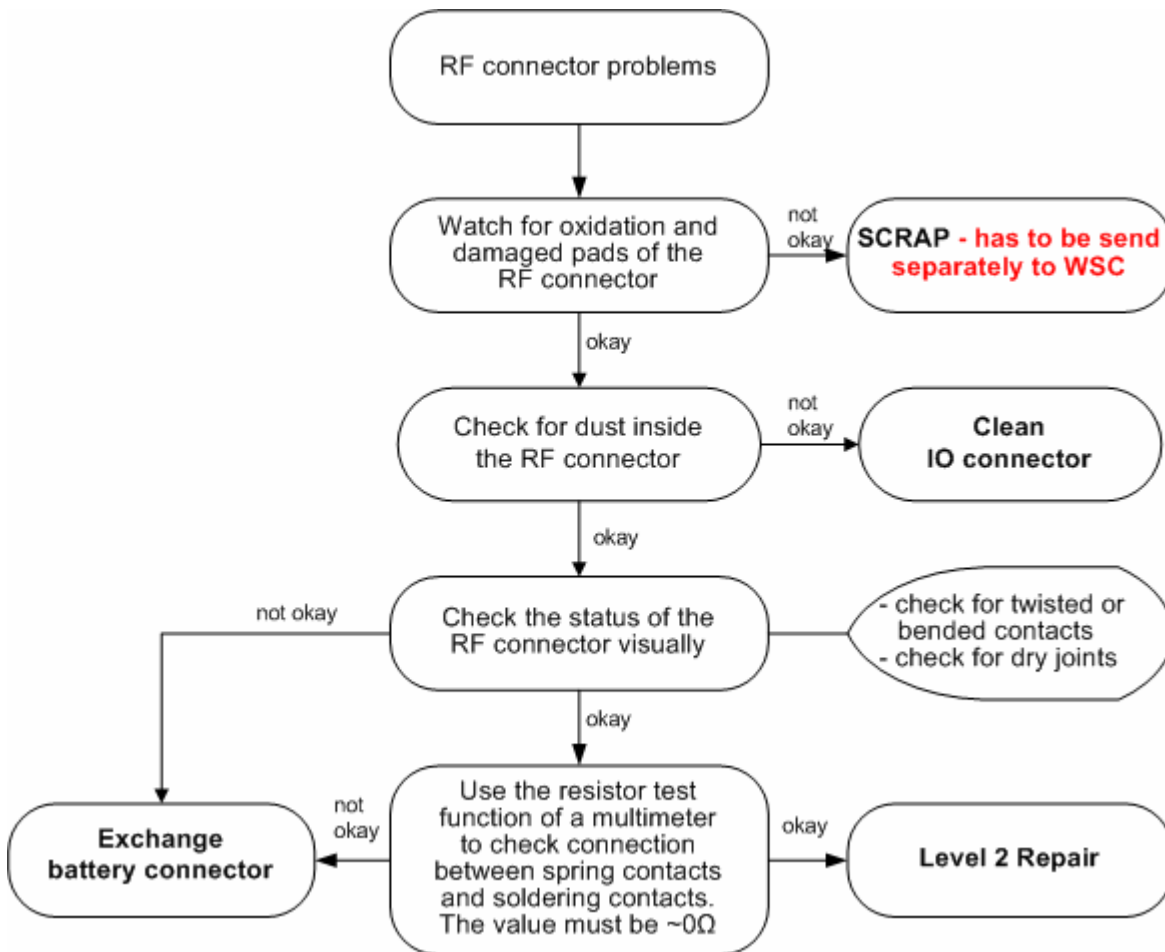
Use soldering iron to remove defective component. Avoid excessive heat! Watch surrounding components!
 Resolder new component afterwards.

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)

6 Connector RF

Fault Symptoms	
Customer: Network search No location update possible	GRT: Failure by TX/RX measurements No location update possible



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

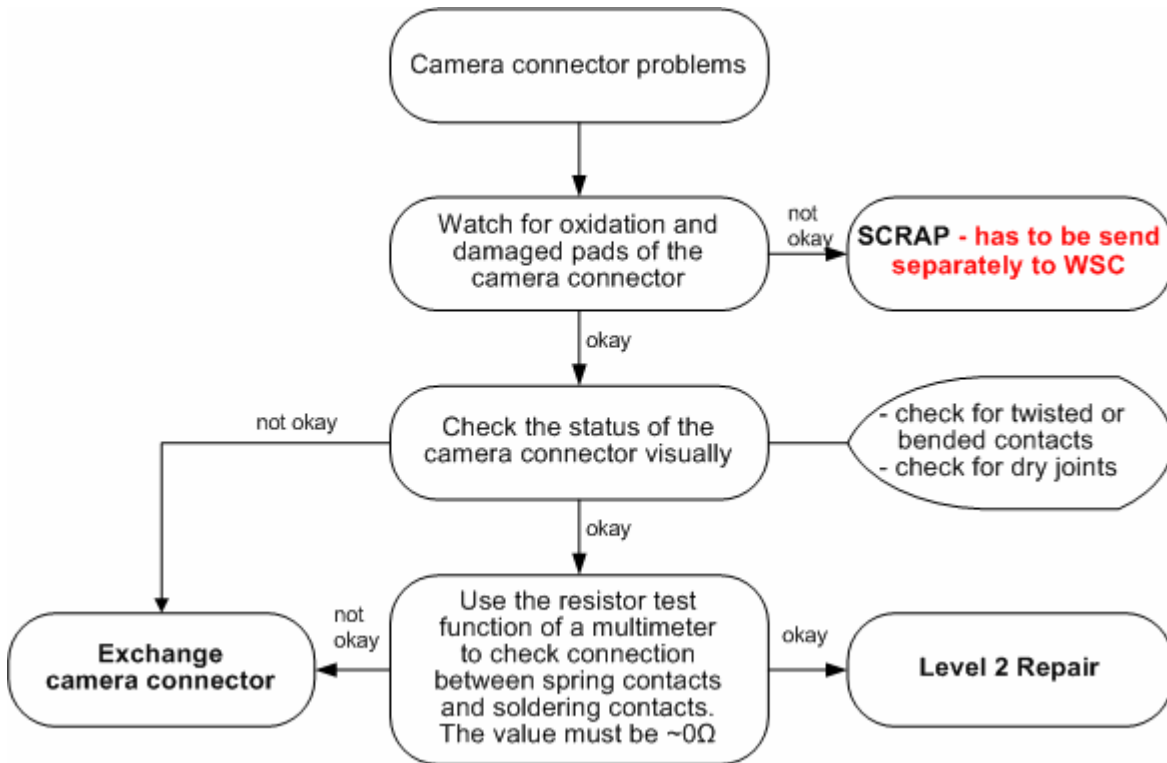
IRIS Diagnose Code:

81100 Radio / No Contact / Int. Antenna
 82100 Radio / Low Receiving Signal / Int. Antenna
 83100 Radio / Dropped Calls / Int. Antenna
 84100 Radio / Call Setup / Int. Antenna

81200 Radio / No Contact / Ext. Antenna
 82200 Radio / Low Receiving Signal / Ext. Antenna
 83200 Radio / Dropped Calls / Ext. Antenna
 84200 Radio / Call Setup / Ext. Antenna

7 Connector Camera (only S65)

Fault Symptoms	
Customer: Camera malfunction	GRT: Tbd.



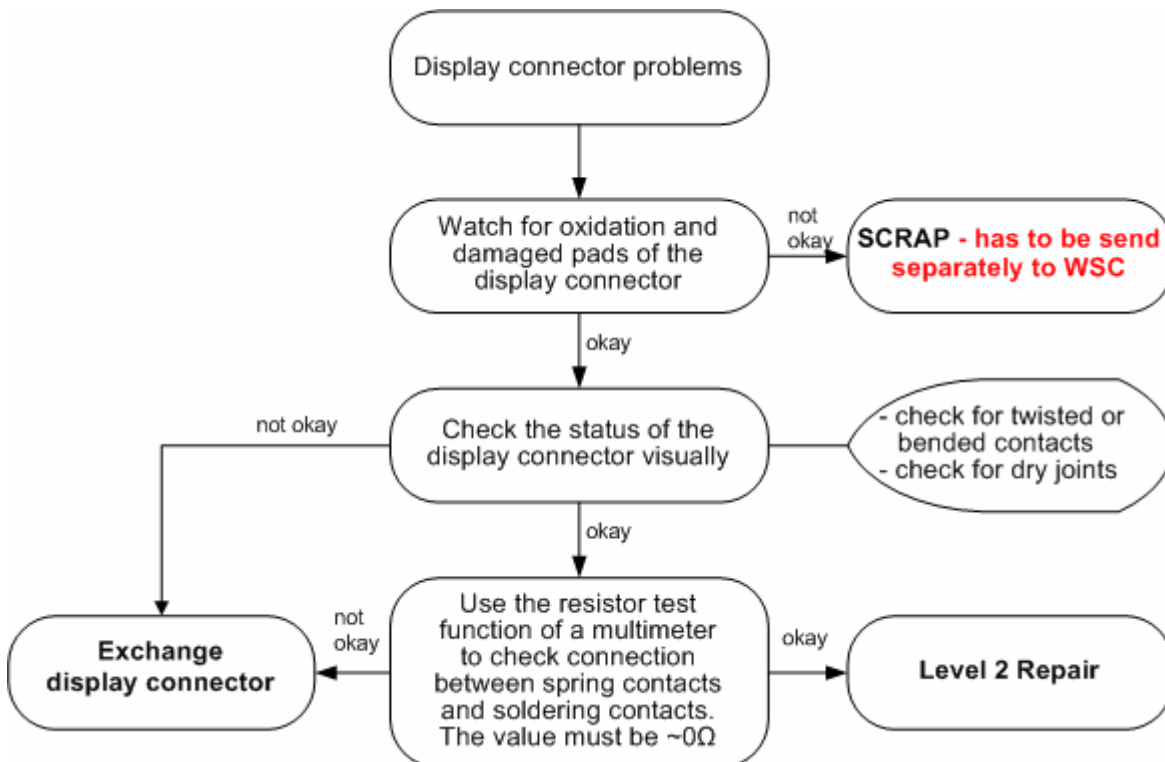
Connector CAMERA

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

8 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



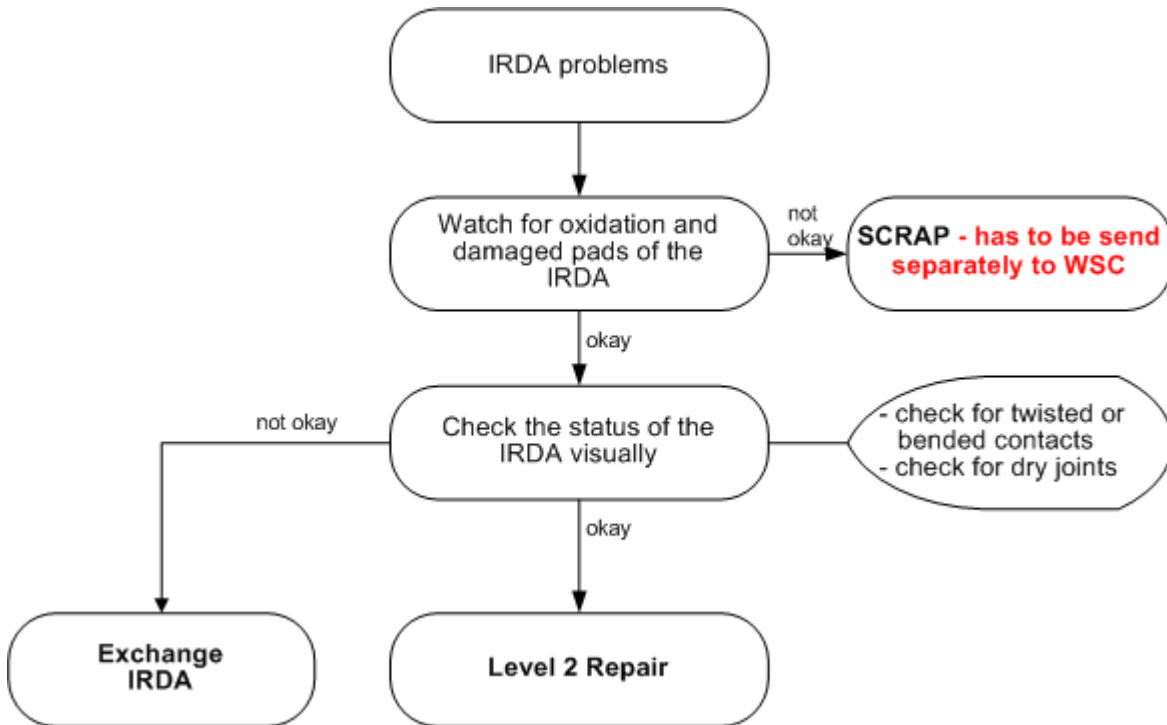
Connector DISPLAY

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

9 IRDA

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



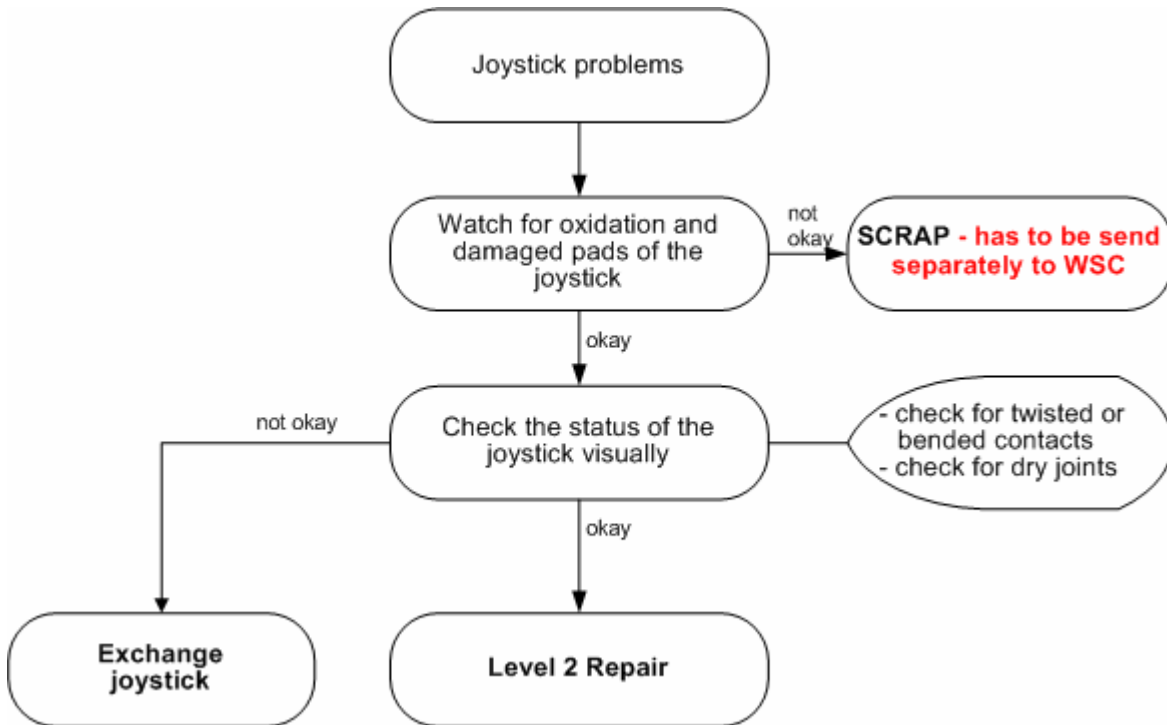
IRDA

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

E-commerce order number: S65: L36810-U6130-D670
SP65: L36197-F5008-F492
Soldering temperature: 240 - 255°C
IRIS Diagnose Code: 41100 Interfaces / IRDA / No Function
41300 Interfaces / IRDA / Mechanical Damage

10 JOYSTICK

Fault Symptoms	
Customer: Joystick malfunction	GRT: 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