

# Service Repair Documentation

## Level 2.5 light – CX75, M75



Release	Date	Department	Notes to change
1.0	06.06..2005	ICM MP CCQ GRM T	New document

## 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 CX75, M75 Level 2 repair documentation and special product disassembling instructions. 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 products related Customer Care Information, and Repair Information who are relevant for CX75 and M75.

CX75 Partnumber on IMEI label: S30880-S7420-#xxx  
M75 Partnumber on IMEI label: S30880-S7430-#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.**

**Attention: Consider the new "LEAD-FREE" soldering rules (available in the communication market), avoid excessive heat.**

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

**Table of Content**

1 CX75, M75 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 Resister Filter.....11

8 Connector Camera .....12

9 Connector Display .....13

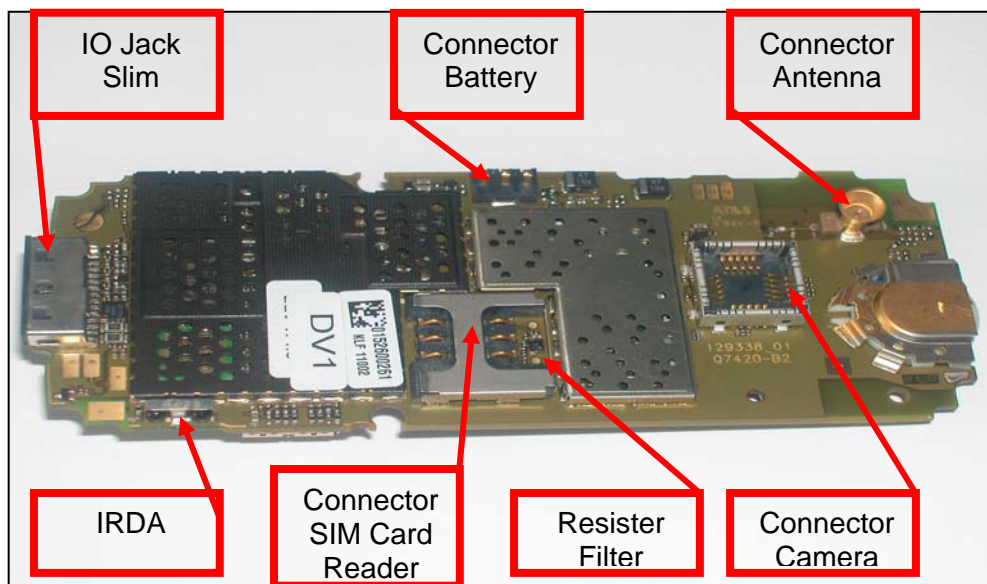
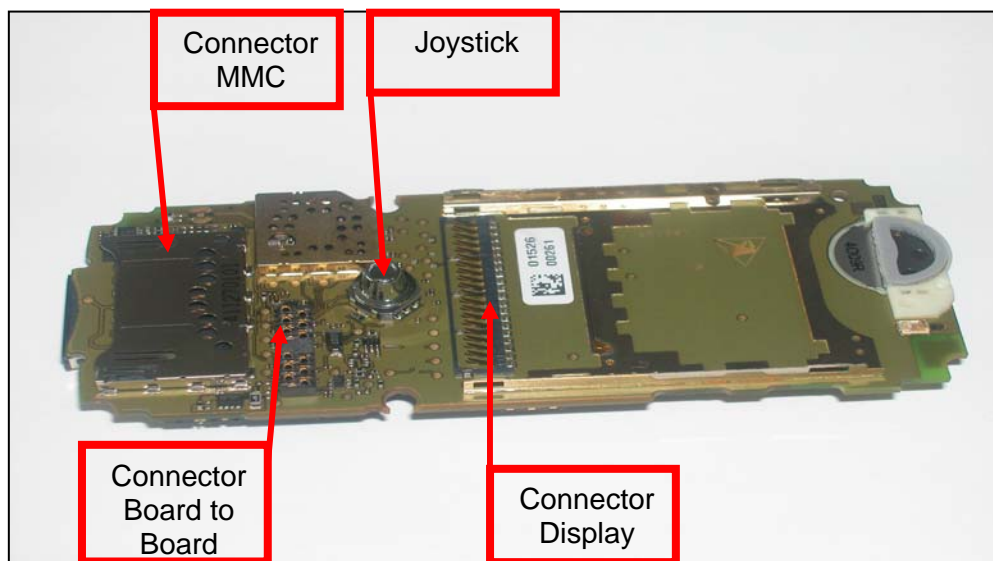
10 IRDA.....14

11 JOYSTICK.....15

## 1 CX75, M75 board layout

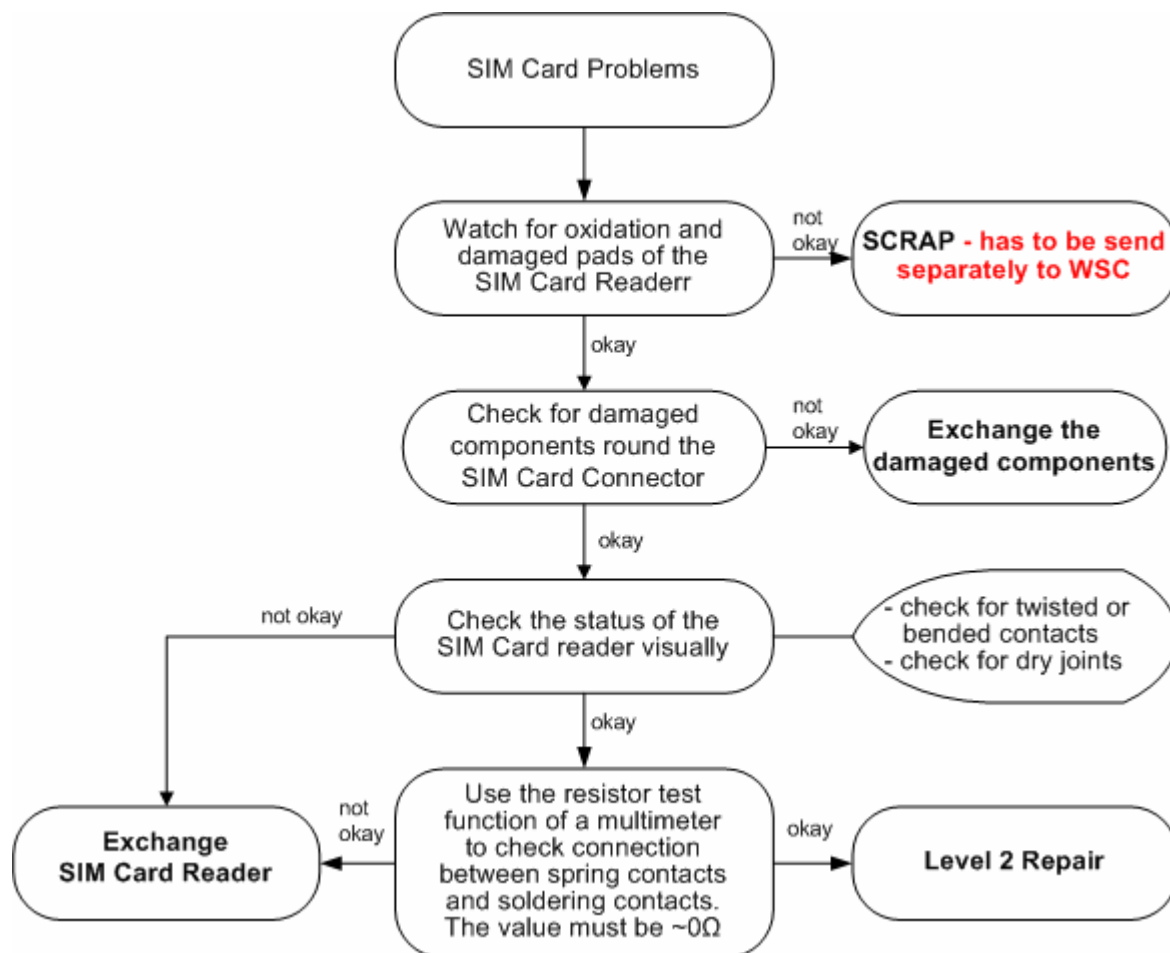
Jigs, Tools and Working materials for all described repairs:

- 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.

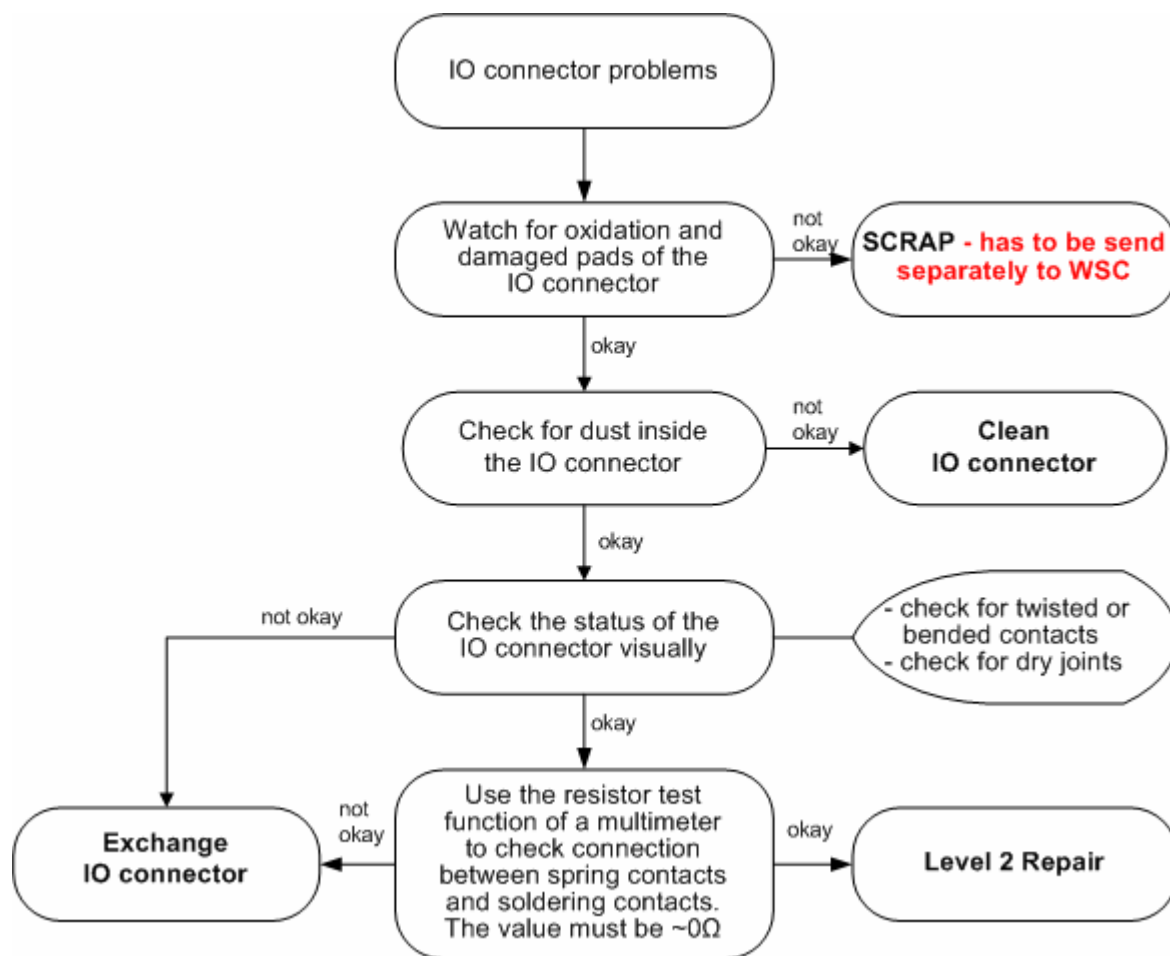
E-commerce order number: L36334-Z97-C337  
E-commerce order name: CONNECTOR SIM CARD READER K1  
Soldering temperature: ~ 360°C TIP Temp.  
IRIS Diagnose Code: 43300 Interface/SIM Cardreader/Mechanical Damage

### Surrounded Components

R1614 RESISTOR 4K7 (Type8)	L36842-C472-J
C1605 CAPACITOR 2220N (Type3)	L36853-C6224-M6
Z1601 FILTER SIM PROTECTION PB FREE	L50620-U6029-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  
E-commerce order name: IO-JACK SLIM 12-POL  
Soldering temperature: ~ 360°C TIP Temp.  
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.

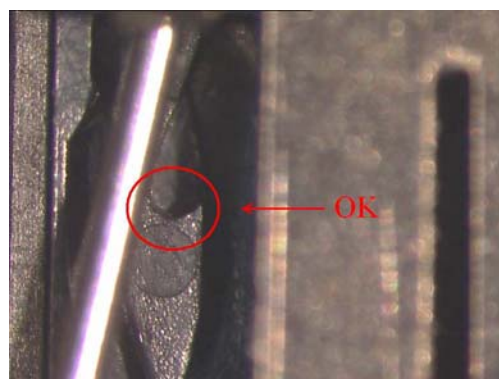
Please follow these instructions:

- 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:**



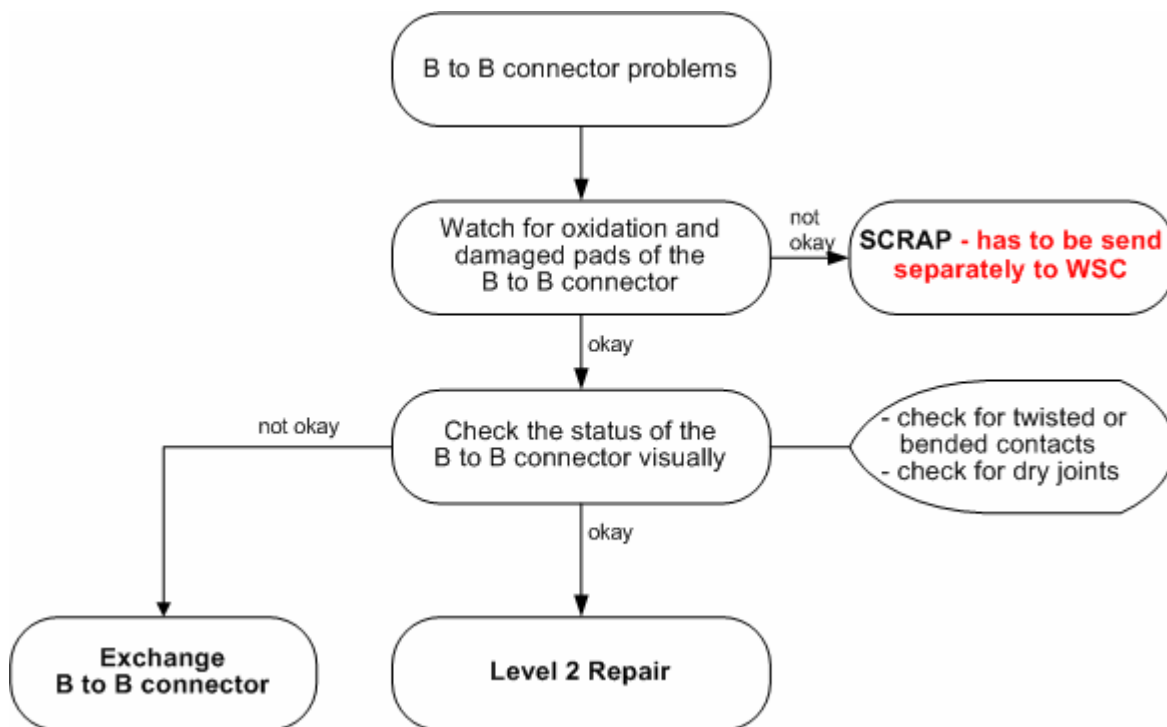
**Lock mechanism damaged**



**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

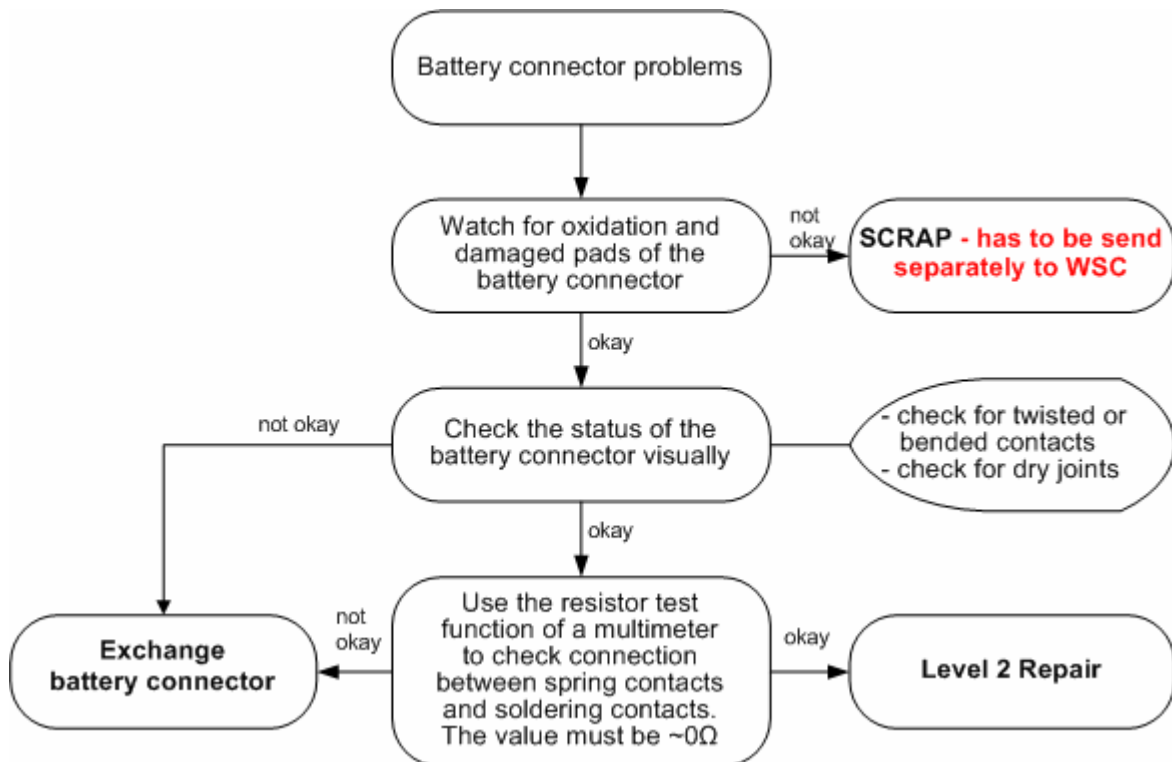
Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L50634-Z97-C346  
 E-commerce order name: CONNECTOR BOARD TO BOARD 12-POL.  
 Soldering temperature: ~ 360°C TIP Temp.  
 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



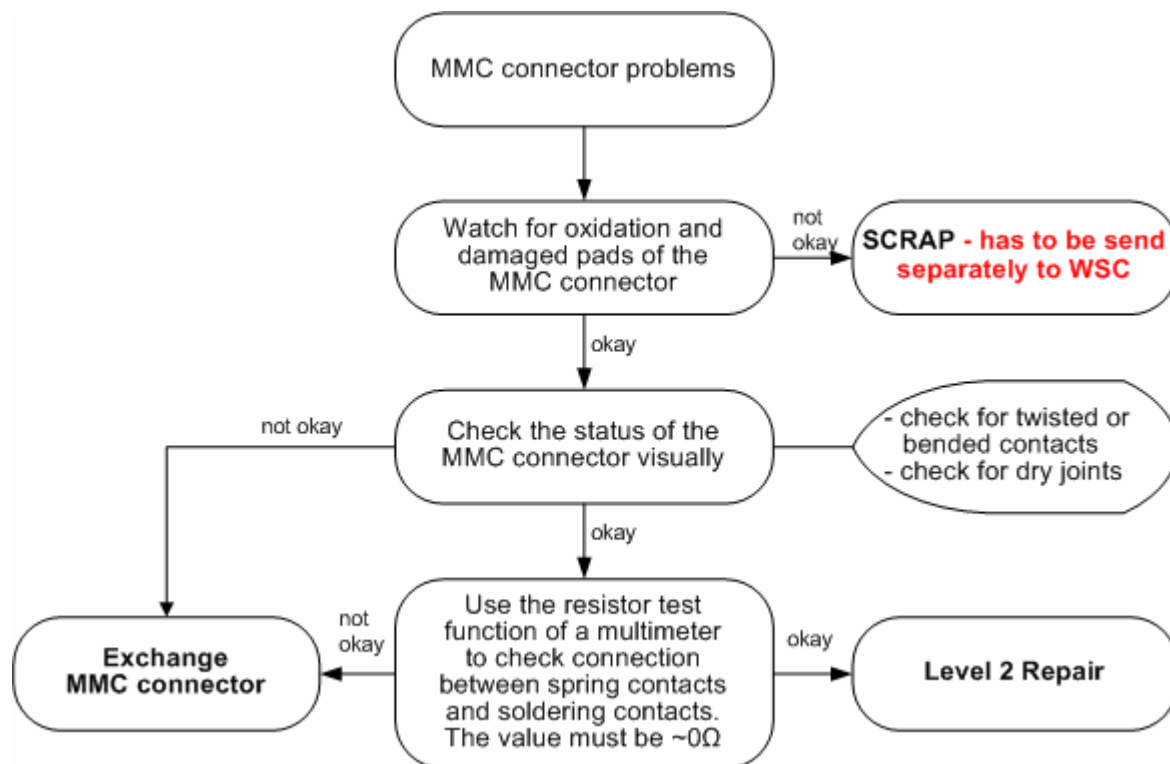
### Connector BATTERY

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  
 E-commerce order name: CONNECTOR BATTERY 3-POL  
 Soldering temperature: ~ 360°C TIP Temp.  
 IRIS Diagnose Code: 13000 Battery/Mechanical Damage

## 5 Connector MMC

Fault Symptoms	
Customer: MMC malfunction	GRT: Tbd.



### Connector MMC

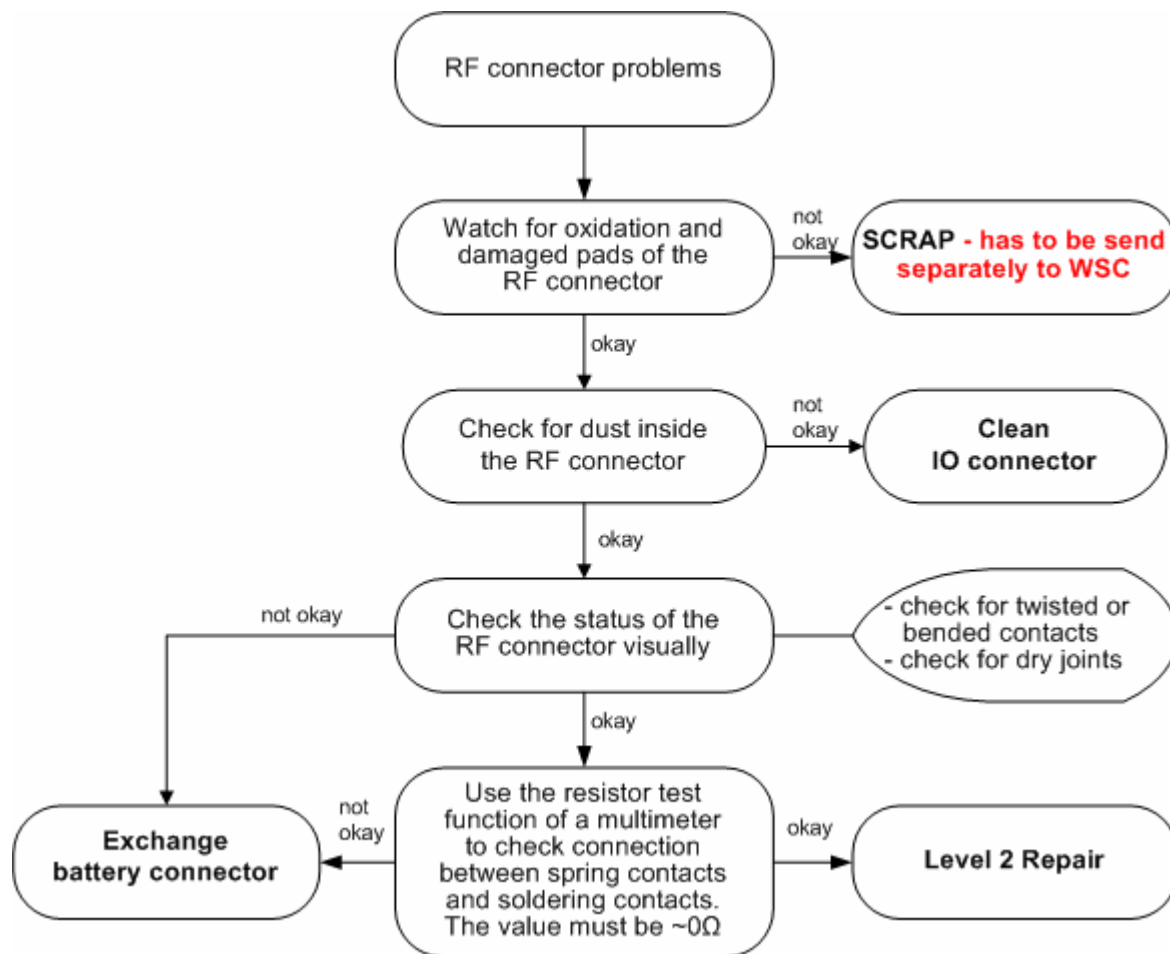
Use soldering iron to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L50634-Z97-C415  
 E-commerce order name: CONNECTOR RS MMC X75; CONNECTOR RS MMC X75  
 Soldering temperature:  $\sim 360^{\circ}\text{C}$  TIP Temp.  
 IRIS Diagnose Code: 4E000 Interfaces/ Memory Card Rerader

**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

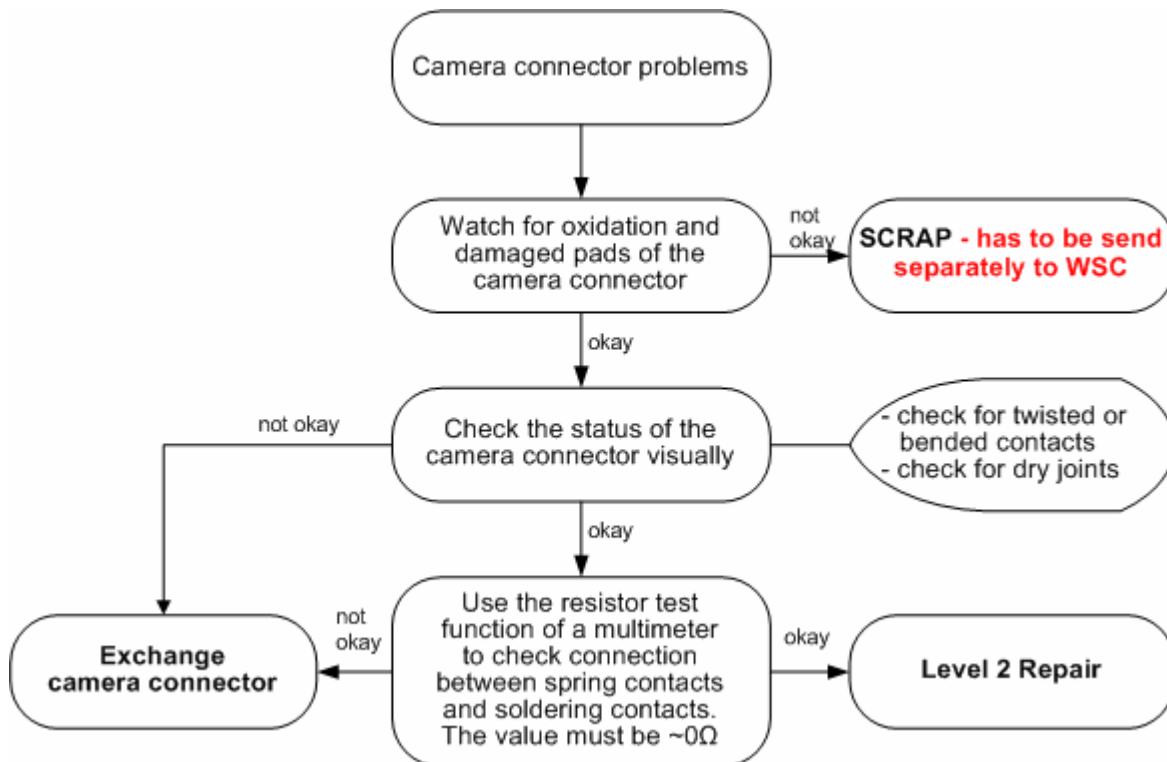
Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

E-commerce order number: L36334-Z93-C297  
 E-commerce order name: CONNECTOR ANTENNA 6mm  
 Soldering temperature: ~ 360°C TIP Temp.  
 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

Fault Symptoms	
Customer: Camera malfunction	GRT: Tbd.



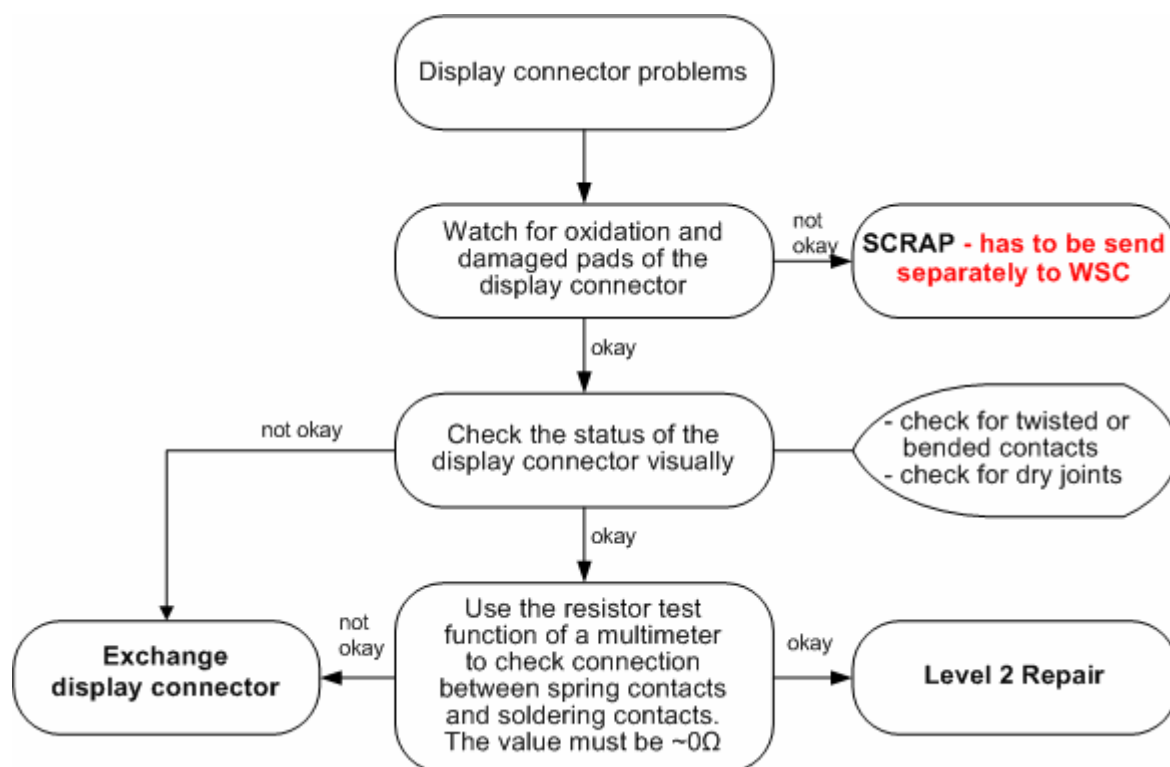
### Connector CAMERA

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

E-commerce order number: L50634-Z97-C379  
 E-commerce order name: CONNECTOR CAMERA-SOCKET  
 Soldering temperature:  $\sim 360^{\circ}\text{C}$  TIP Temp.  
 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



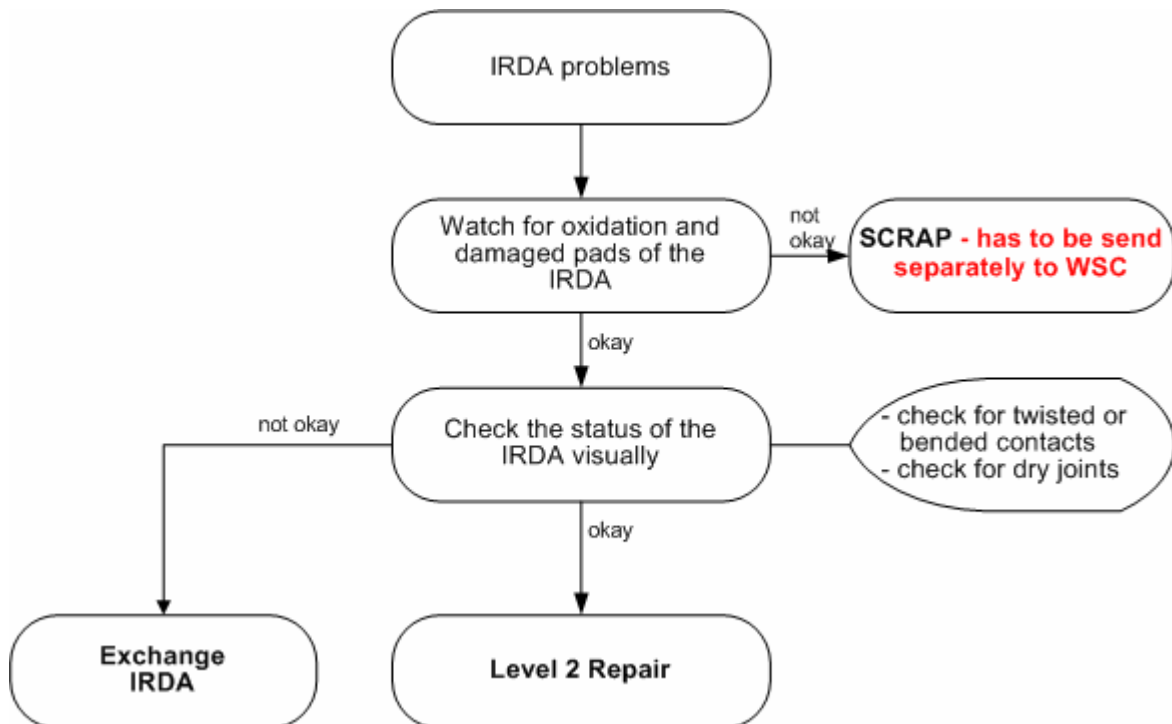
### Connector DISPLAY

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

E-commerce order number: L50634-Z97-C380  
 E-commerce order name: CONNECTOR DISPLAY 20POL  
 Soldering temperature:  $\sim 360^{\circ}\text{C}$  TIP Temp.  
 IRIS Diagnose Code: 21000 Display / Performance  
 22000 Display / Background Illumination

## 9 IRDA

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



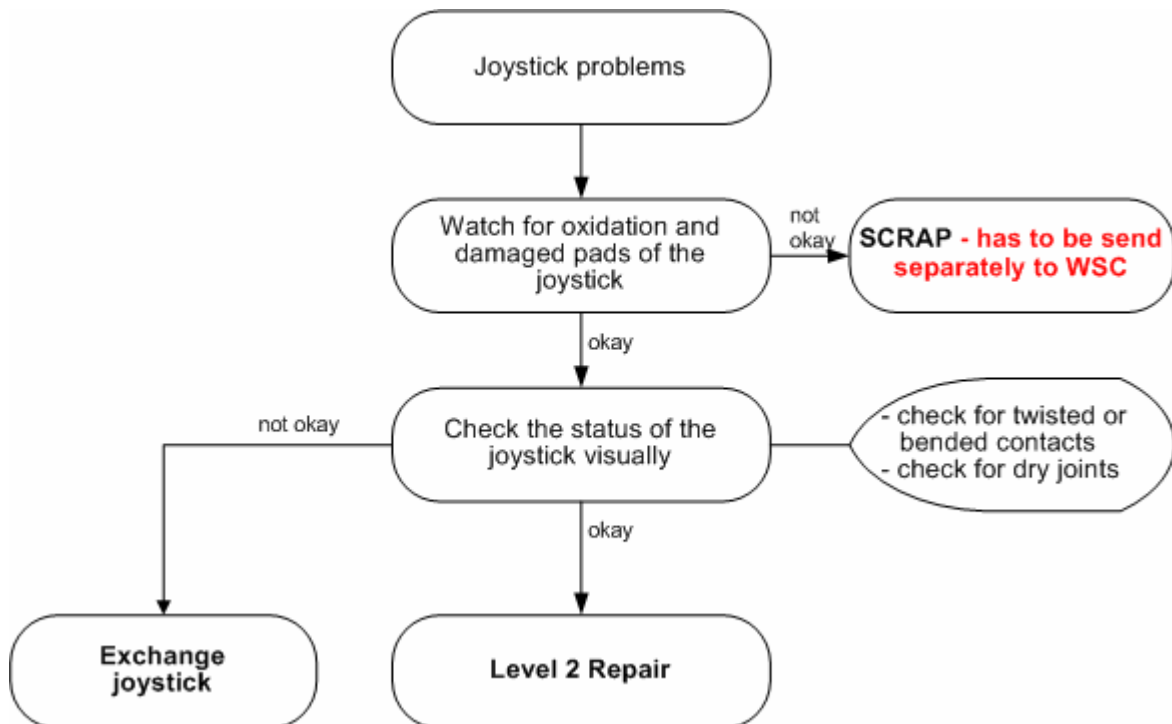
### IRDA

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

E-commerce order number: L36197-F5008-F492  
E-commerce order name: IRDA 115.2 KBIT  
Soldering temperature: ~ 360°C TIP Temp.  
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  
E-commerce order name: JOYSTICK  
Soldering temperature: ~ 360°C TIP Temp.  
IRIS Diagnose Code: 32100 Keys / Main / No Function  
32200 Keys / Main / Reduced Functionality