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Service Repair Documentation
Level 2.5 light – C75

Release	Date	Department	Notes to change
1.0	08.06.2005	ICM MP CCQ GRM T	New document

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TI_Repair_L2,5L_C75_R1.0

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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 C75 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 C75 related Customer Care Information

C75   Partnumber on IMEI label: S30880-S6970-#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

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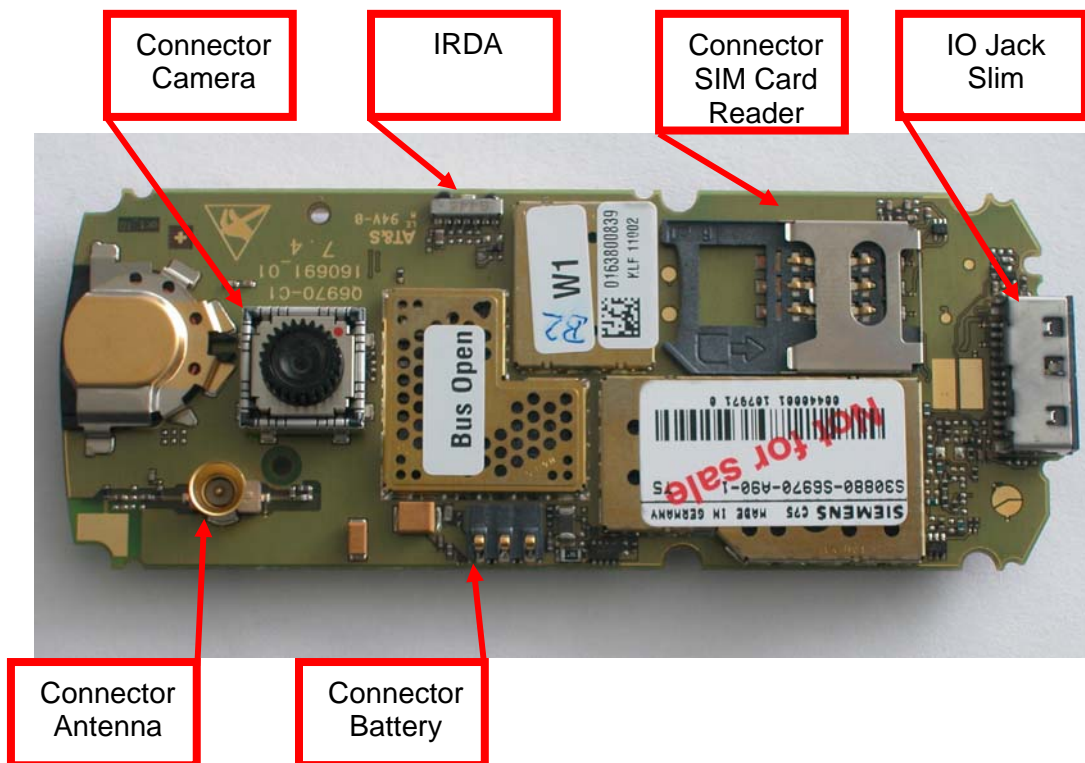# Table of Content

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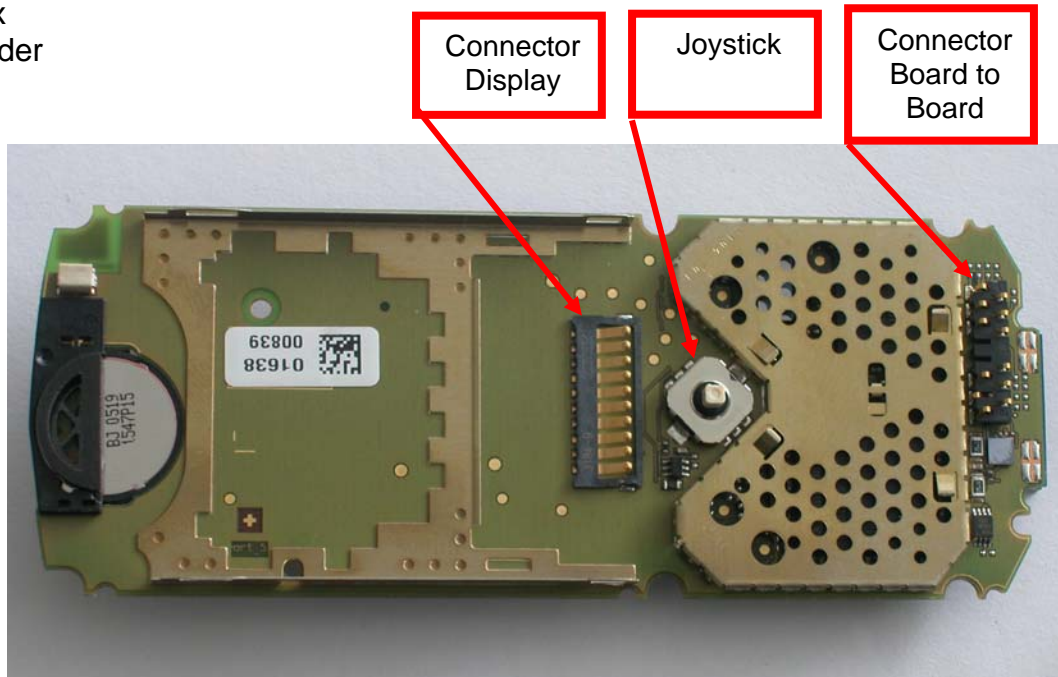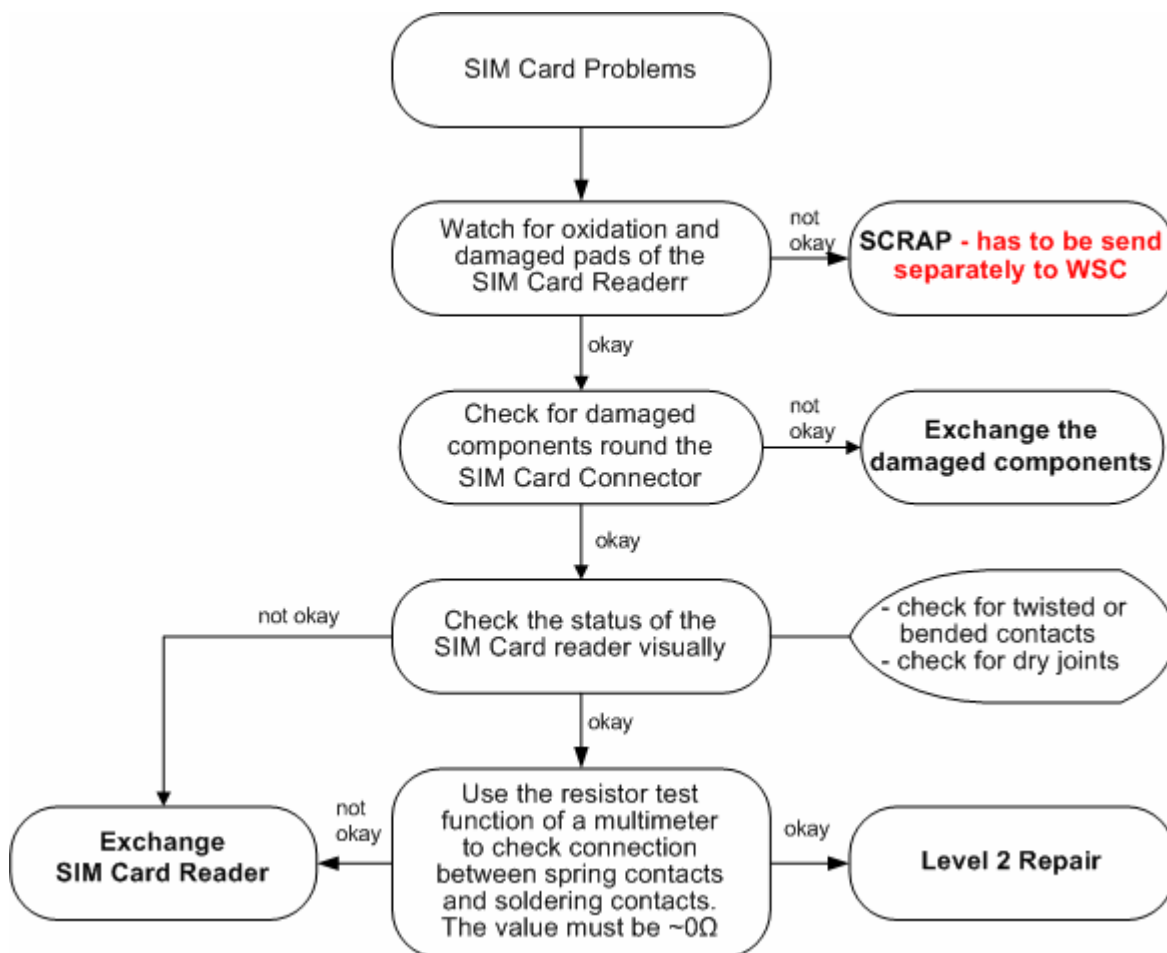
1 C75 board layout

Jigs, Tools and working materials for all described repairs:
- hot air blower
- soldering gun
- tweezers
- flux
- solder

Connector Display | Joystick | Connector Board to Board

Connector Camera | IRDA | Connector SIM Card Reader | IO Jack Slim

Connector Antenna | Connector Battery

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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: L50634-Z97-C406
E-commerce order name: CONNECTOR SIM CARD READER R65 (B)
Soldering temperature: ~ 360°C TIP Temp.
IRIS Diagnose Code: 43300 Interface/SIM Card reader/Mechanical Damage

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3 Connector IO Jack

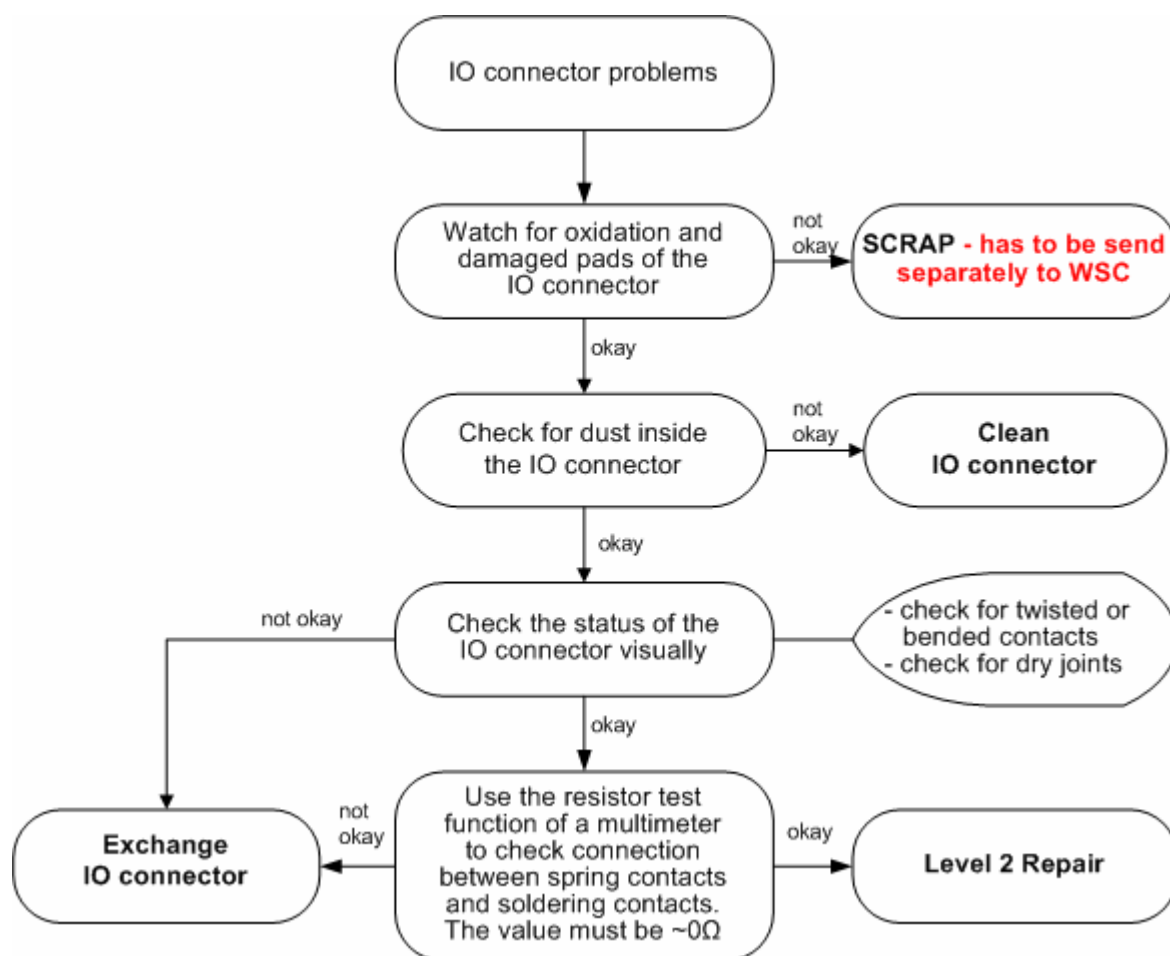| Fault Symptoms	
Customer: Charging Problems Problems with external loudspeaker or microphone when using a car kit Problems with accessories connected at the IO connector	GRT: No connection to GRT Tbd.

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

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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 connecter by using soldering iron under consideration of the max. allowed temperature range.

Samples of critical area:

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4   Connector Board to Board

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

```
              ┌──────────────────────┐
              │ B to B connector     │
              │ problems             │
              └──────────────────────┘
                         │
                         ▼
    ┌──────────────────────────┐  not   ┌──────────────────────────┐
    │ Watch for oxidation and  │ okay   │ SCRAP - has to be send   │
    │ damaged pads of the      ├───────▶│ separately to WSC        │
    │ B to B connector         │        └──────────────────────────┘
    └──────────────────────────┘
                         │ okay
                         ▼
    not okay  ┌──────────────────────────┐   ┌──────────────────────┐
   ◀──────────┤ Check the status of the  ├──▶│ - check for twisted  │
              │ B to B connector visually│   │   or bended contacts │
              └──────────────────────────┘   │ - check for dry joints│
                         │ okay              └──────────────────────┘
                         ▼
    ┌──────────────────┐  ┌──────────────────┐
    │ Exchange         │  │ Level 2 Repair   │
    │ B to B connector │  │                  │
    └──────────────────┘  └──────────────────┘
```
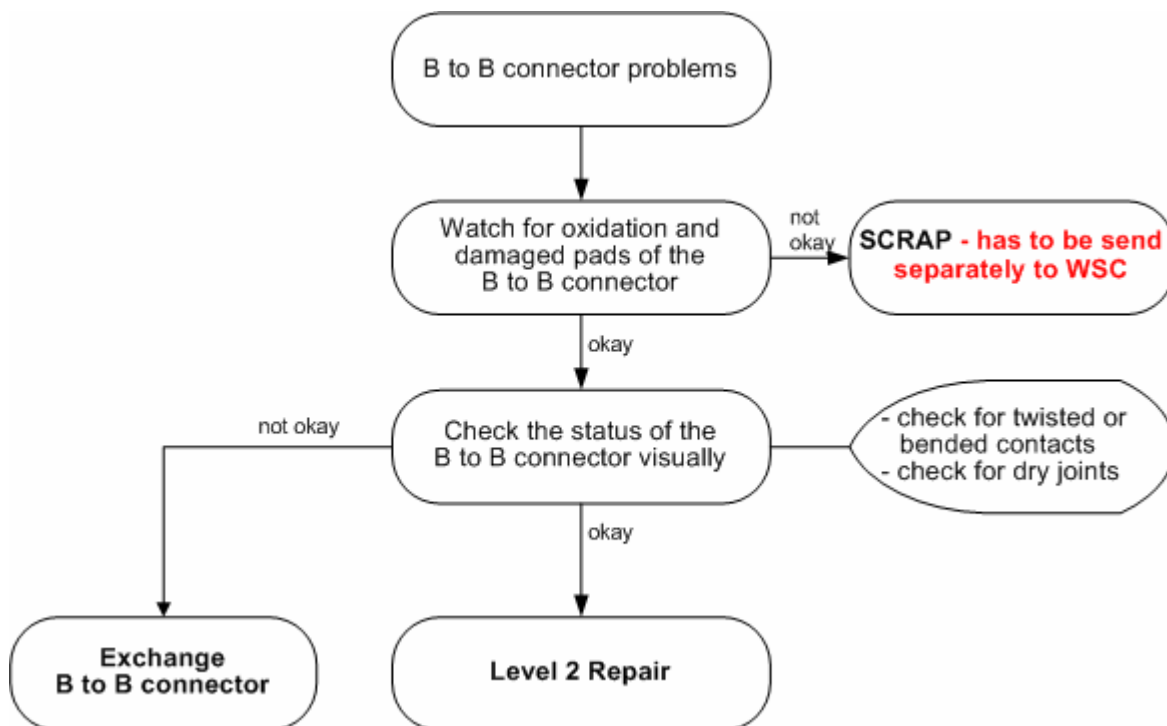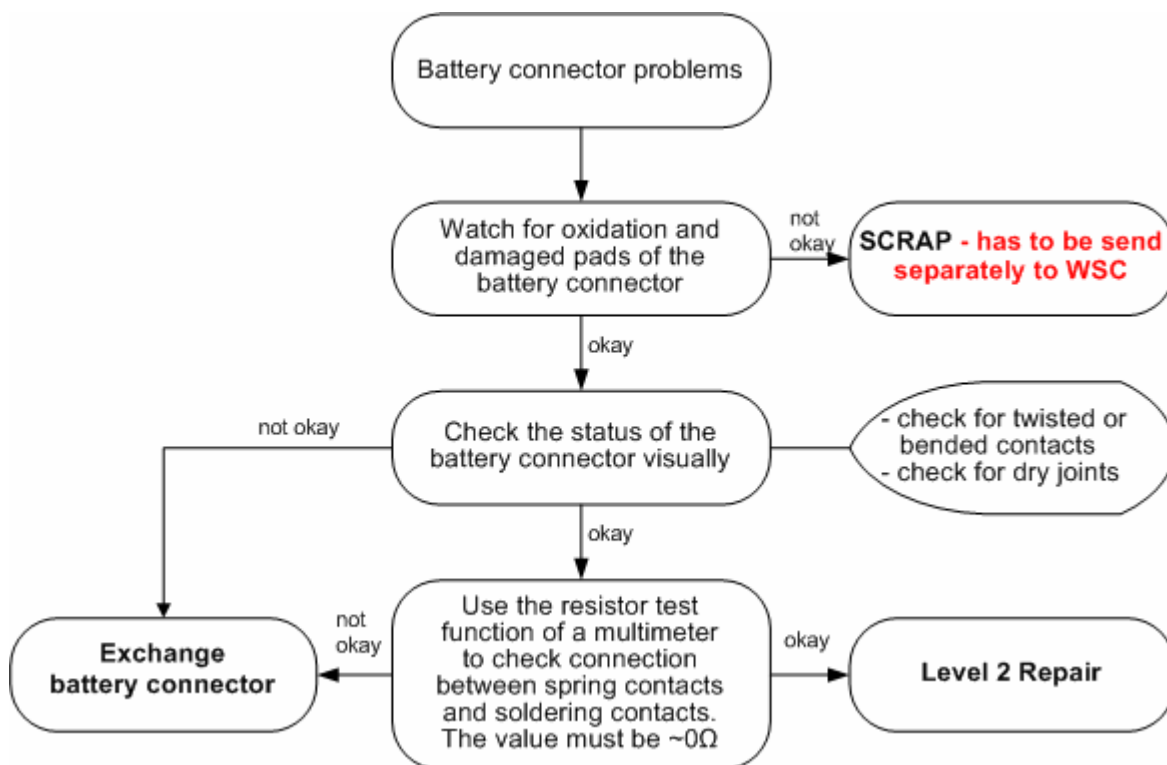
Connector Board to Board
Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components!
Resolder new component afterwards.

E-commerce order number: L50634-Z97-C383
E-commerce order name: CONNECTOR BOARD TO BOARD 12-POL. X75
Soldering temperature: ~ 360°C TIP Temp.
IRIS Diagnose Code: 32100 Keys / Main / No Function
                             32200 Keys / Main / Reduced Functionality
                             36000 Keys / Illumination

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5 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-C336
E-commerce order name:	CONNECTOR BATTERY 3-POL R65
Soldering temperature:	~ 360°C TIP Temp.
IRIS Diagnose Code:	13000 Battery/Mechanical Damage

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6   Connector Camera

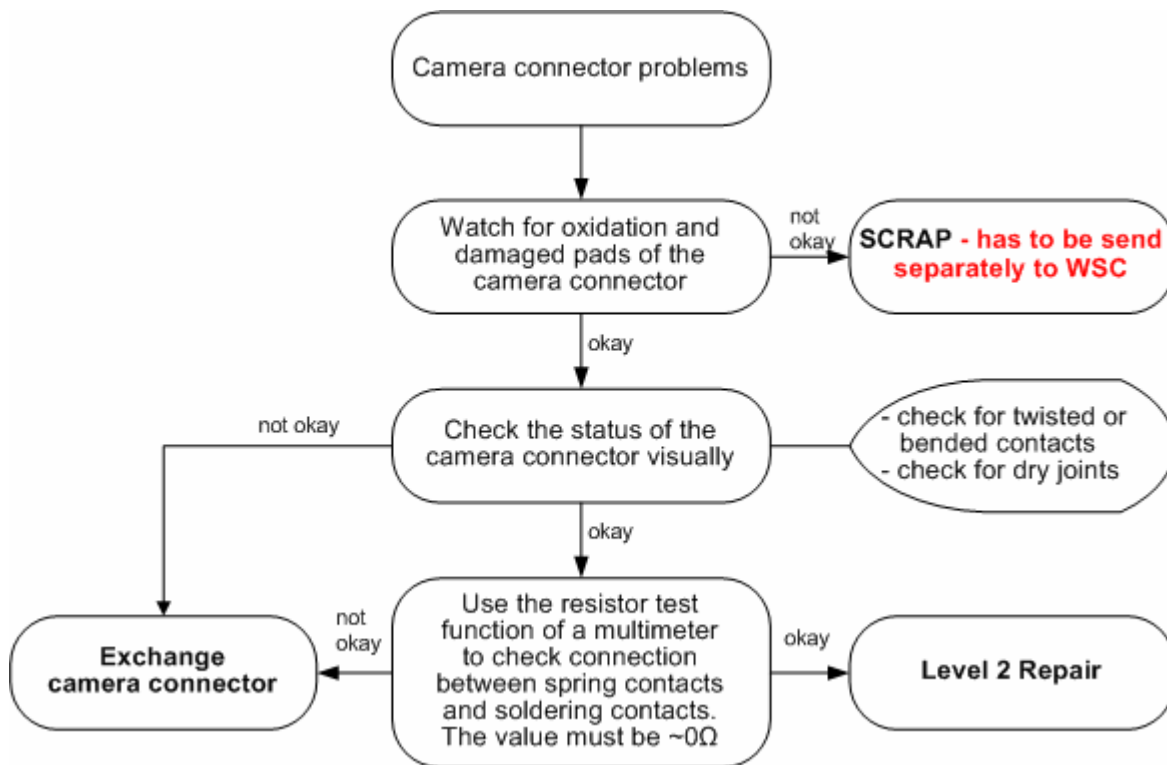| Fault Symptoms	
Customer: Camera malfunction	GRT: Tbd.

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: ~ 360°C TIP Temp.
IRIS Diagnose Code: BA000 Accessories / Camera

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7 Connector Display

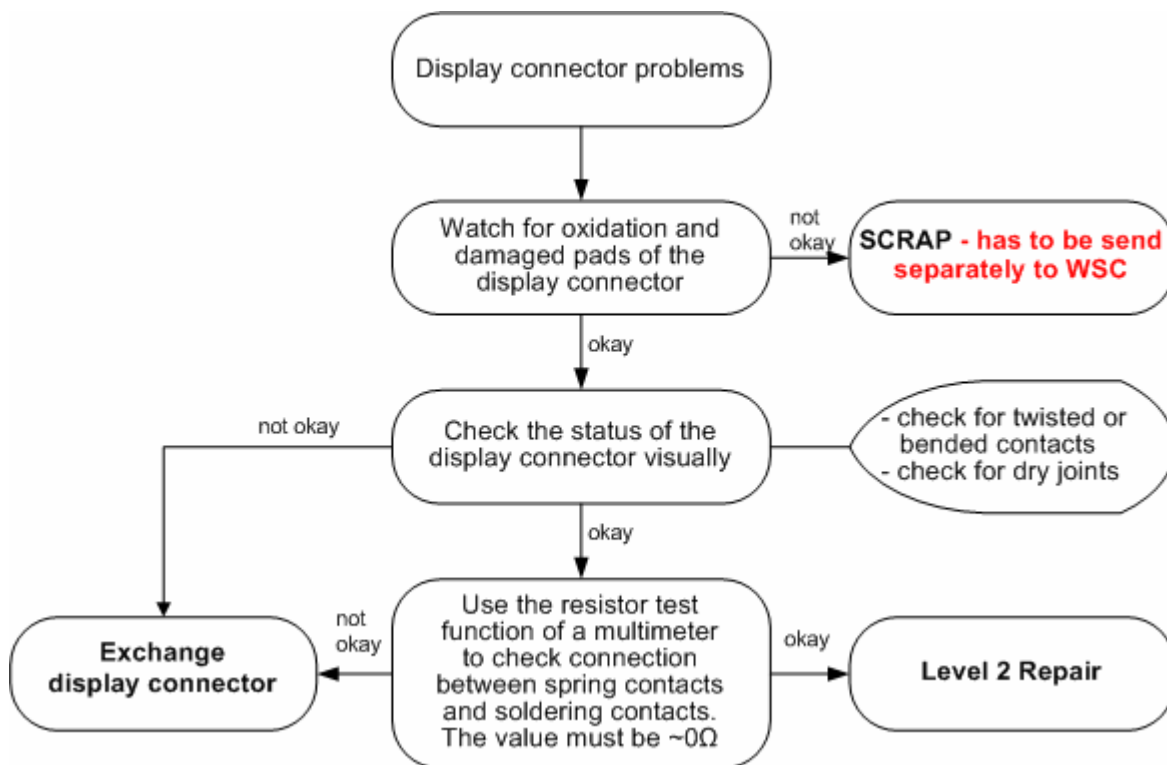| Fault Symptoms	
Customer: Display problems, like missing lines or columns on the LCD or display contrast problems or illumination problems	GRT: Display problems

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
E-commerce order name: CONNECTOR DISPLAY 10POL
Soldering temperature: ~ 360°C TIP Temp.
IRIS Diagnose Code: 21000 Display / Performance
                                        22000 Display / Background Illumination

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8 IRDA

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

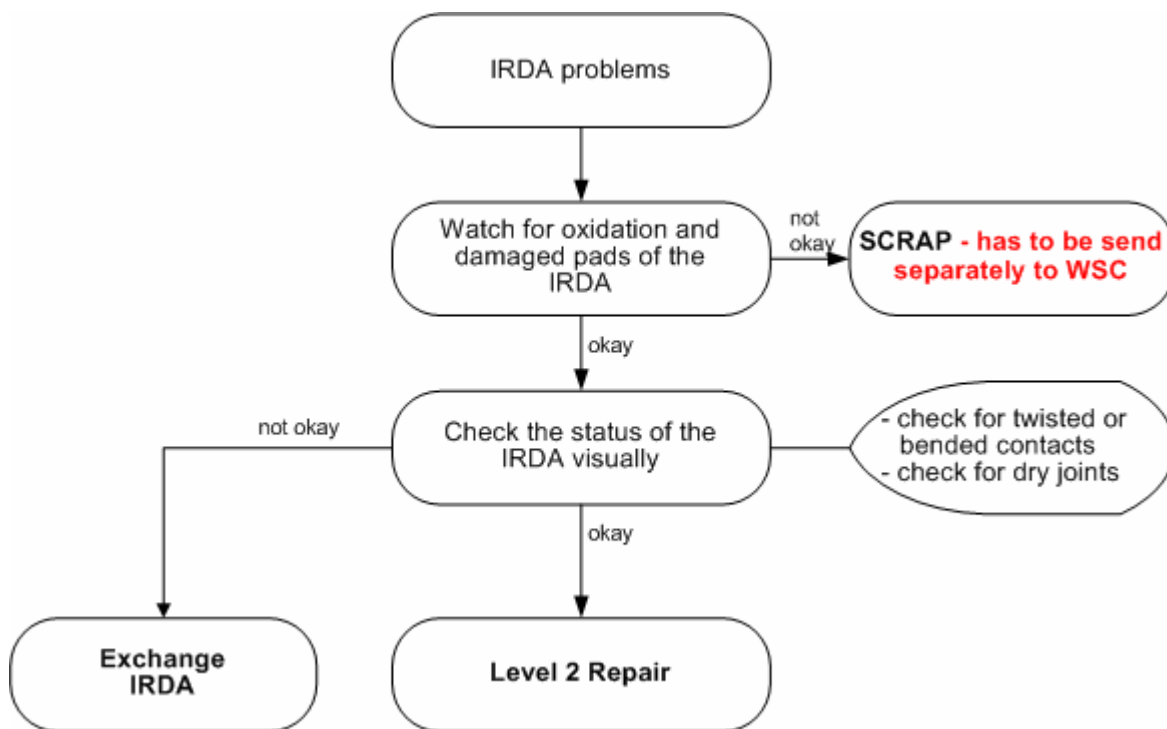IRDA
Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components!
Resolder new component afterwards.

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

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9 JOYSTICK

Fault Symptoms	
Customer: Joystick malfunction	GRT: Tbd.

```
                    ┌─────────────────┐
                    │ Joystick problems│
                    └─────────────────┘
                             │
                             ▼
        ┌─────────────────────┐   not      ┌──────────────────────┐
        │ Watch for oxidation │   okay     │ SCRAP - has to be send│
        │ and damaged pads of │ ─────────▶ │ separately to WSC     │
        │ the joystick        │            └──────────────────────┘
        └─────────────────────┘
                    │ okay
                    ▼
  not okay  ┌─────────────────────┐      ┌─────────────────────────┐
◀───────────│ Check the status of │──────│ - check for twisted or  │
            │ the joystick visually│      │   bended contacts       │
            └─────────────────────┘      │ - check for dry joints  │
                    │ okay              └─────────────────────────┘
                    ▼
  ┌──────────────┐      ┌──────────────┐
  │ Exchange     │      │ Level 2 Repair│
  │ joystick     │      │              │
  └──────────────┘      └──────────────┘
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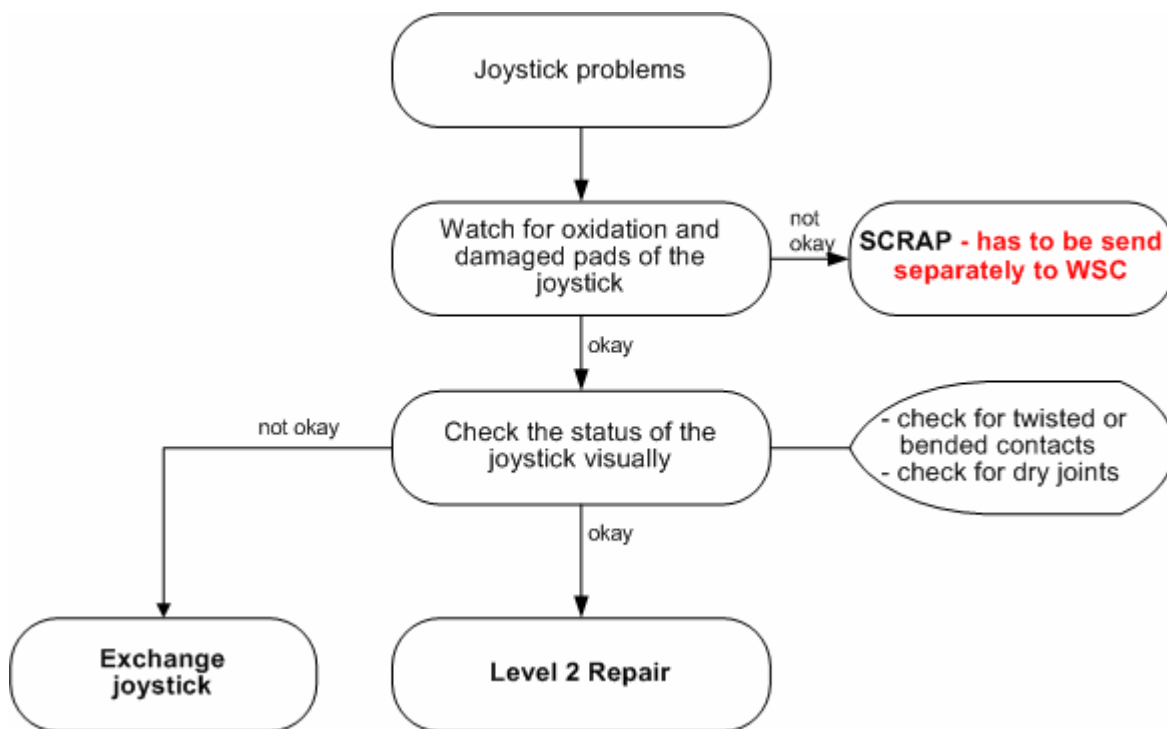
Joystick
Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components!
Resolder new component afterwards.

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

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