

Service Repair Documentation

Level 2.5 - SK65



Release	Date	Department	Notes to change
1.0	29.10.2004	ICM MP CCQ GRM T	New document

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 SK65 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 SK65 related Customer Care Information

SK65 Partnumber on IMEI label: S30880-S4960-#xxx

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

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

Table of Content

1 SK65 board layout.....4

2 Connector SIM Card Reader6

3 Connector IO Jack.....7

4 Connector Battery8

5 Connector ROTARY LCD MMI.....9

6 Connector RF Internal Antenna.....10

7 IRDA.....11

8 Connector Display12

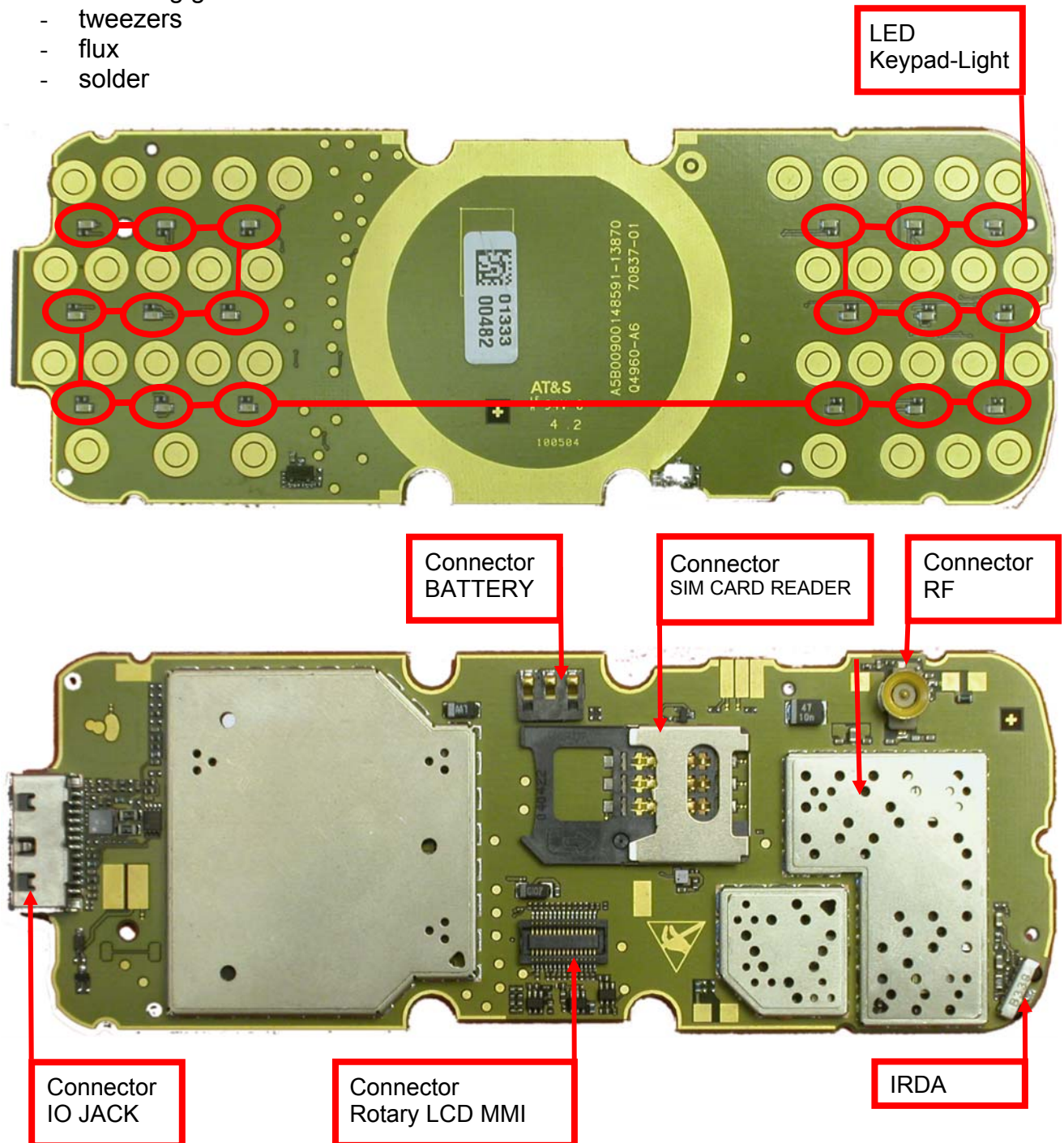
9 Connector MMI (Keypad)13

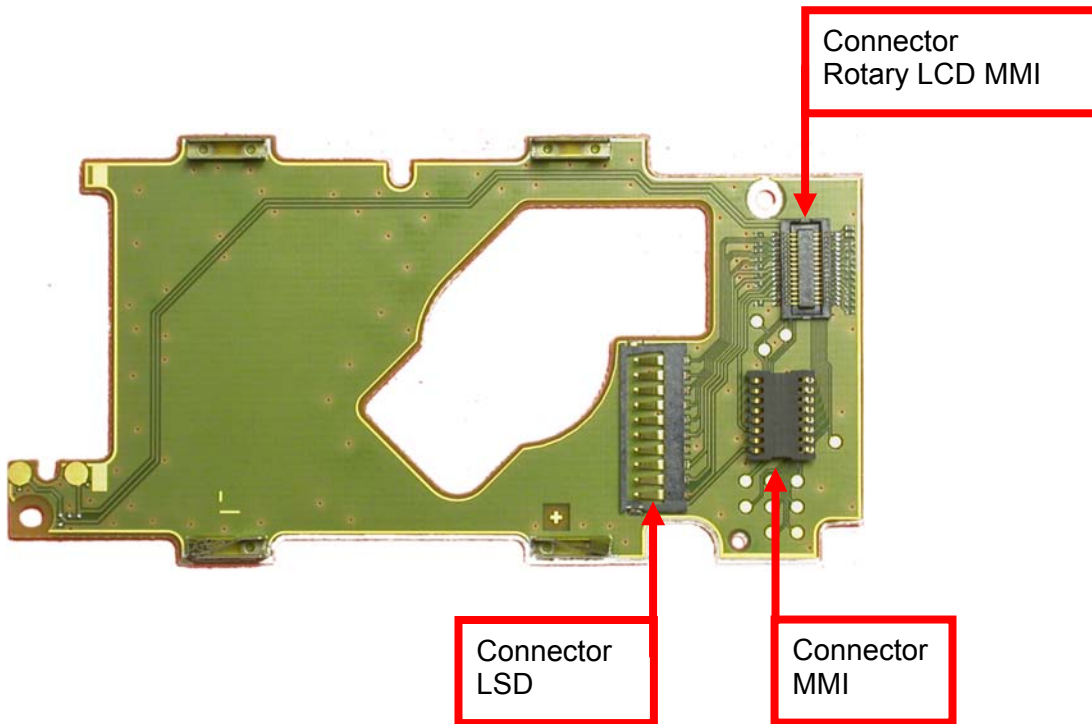
10 LED KEYPAD-LIGHT14

1 SK65 board layout

Jigs, Tools and Working materials for all described repairs:

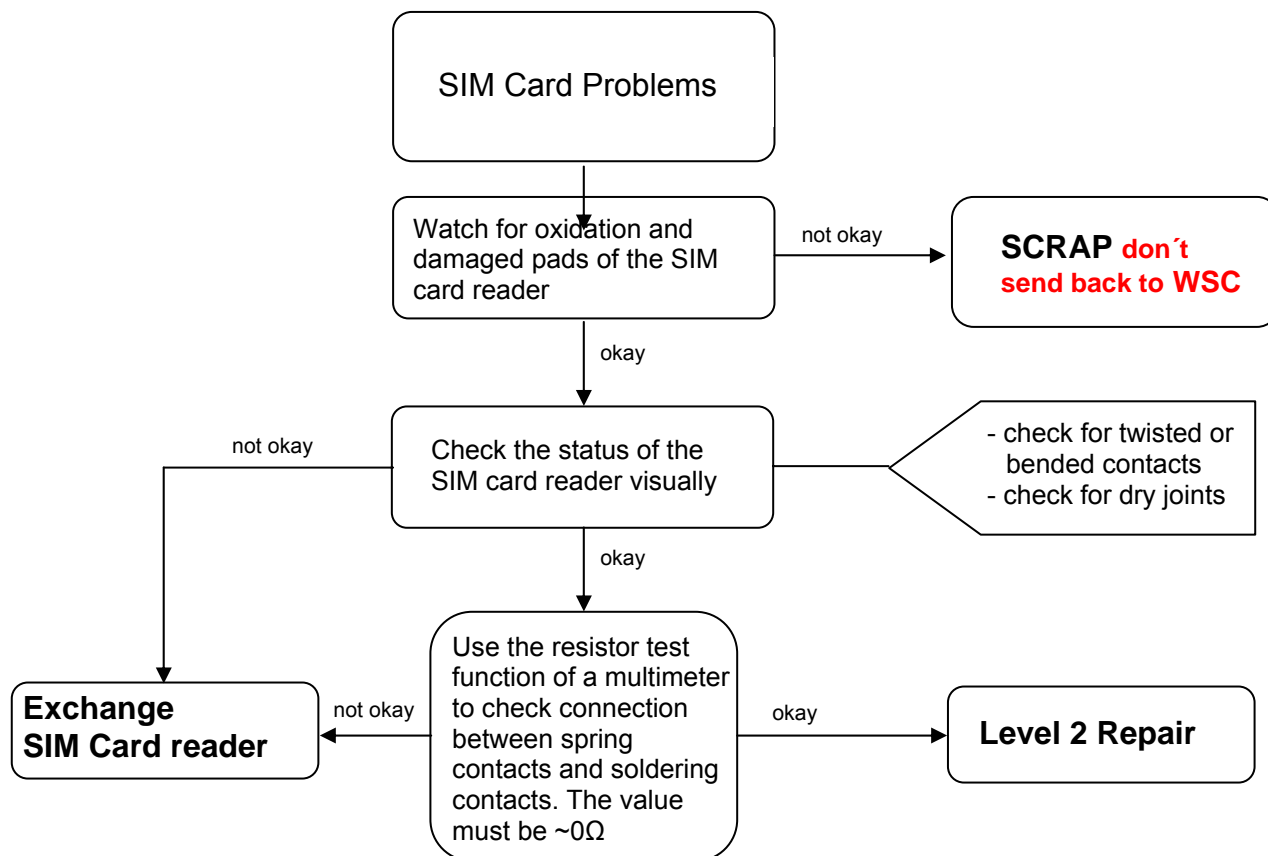
- hot air blower
- soldering gun
- tweezers
- flux
- solder





2 Connector SIM Card Reader

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



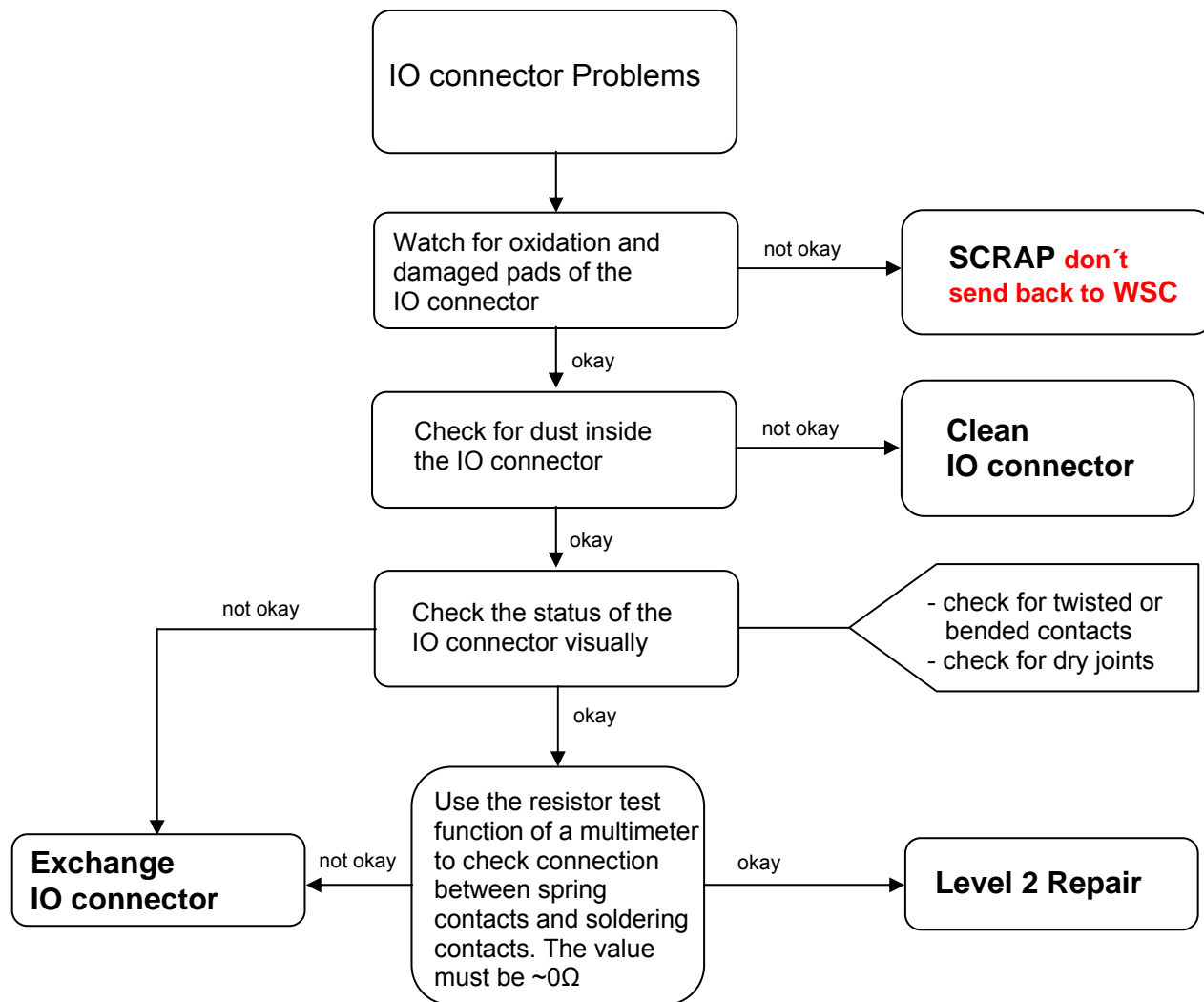
Connector SIM Card Reader

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

E-commerce order number: L36334-Z97-C406
Soldering temperature: 240 - 255°C
IRIS Diagnose Code: 43300 Interface/SIM Cardreader/Mechanical Damage

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.



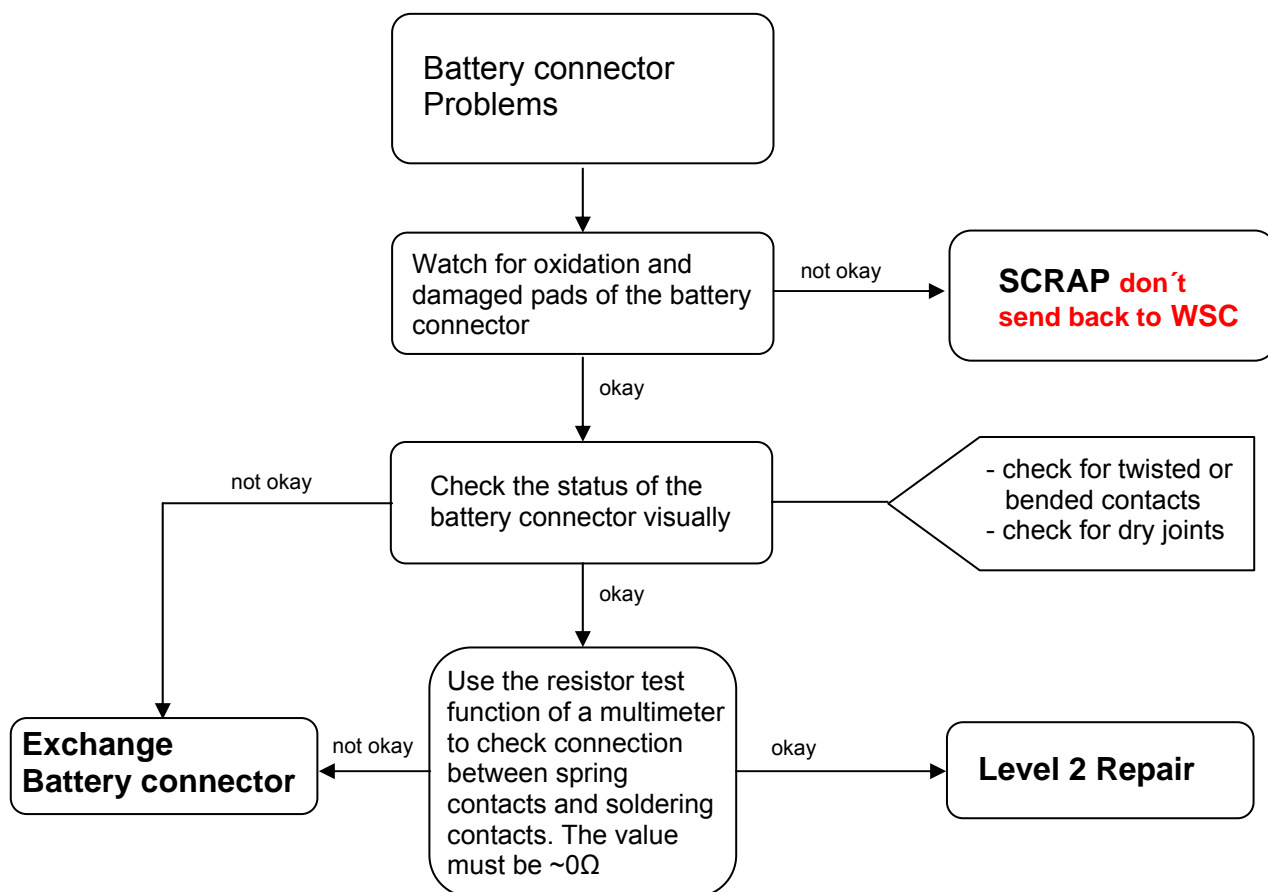
Connector IO Jack

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

E-commerce order number: L36334-Z93-C303
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

4 Connector Battery

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



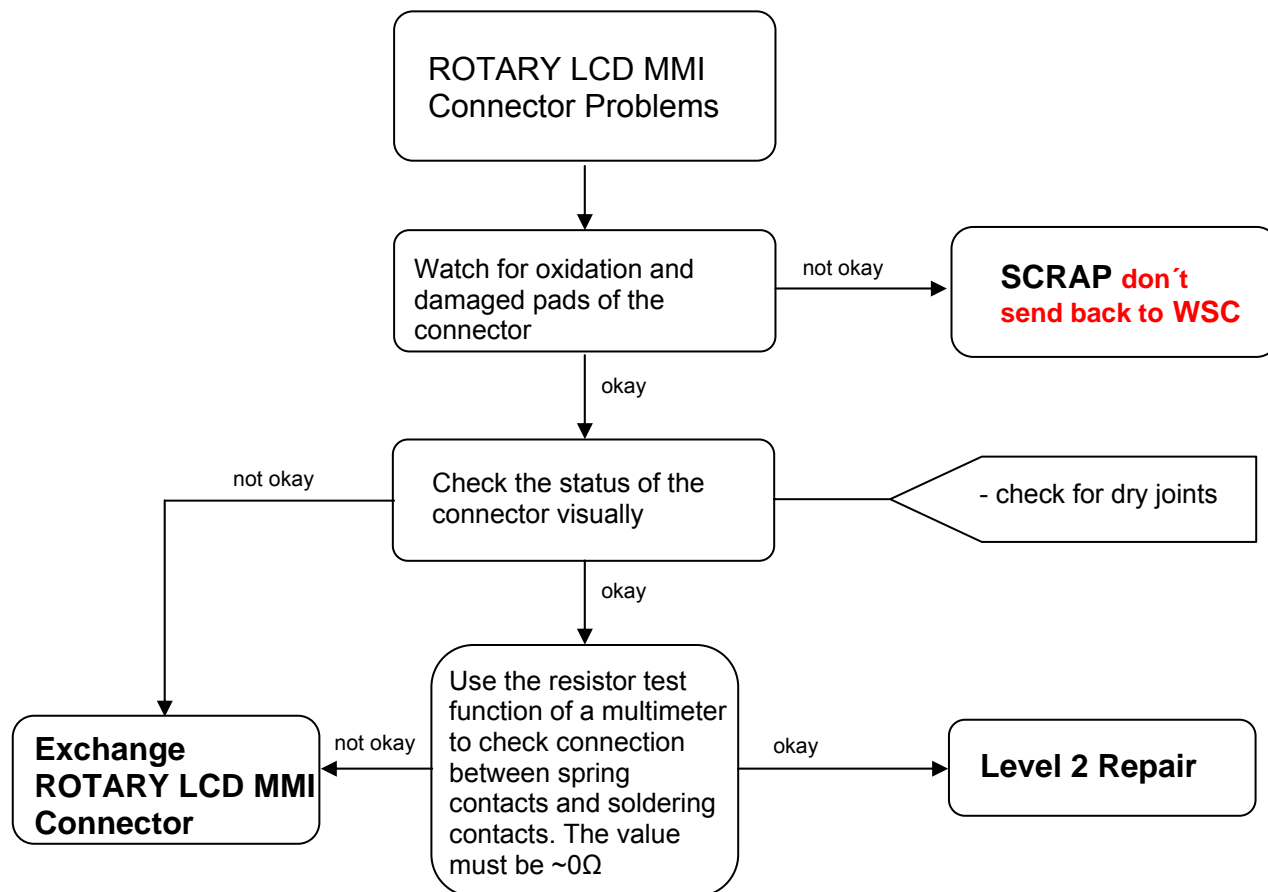
Connector BATTERY

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

E-commerce order number: L36334-Z97-C336
Soldering temperature: 240 - 255°C
IRIS Diagnose Code: 13000 Battery/Mechanical Damage

5 Connector ROTARY LCD MMI

Fault Symptoms	
Customer: Display problems, like missing lines or columns on the LCD or display contrast problems or illumination problems Keypad illumination does not work Joystick malfunction	GRT: Display problems Tbd. Tbd.



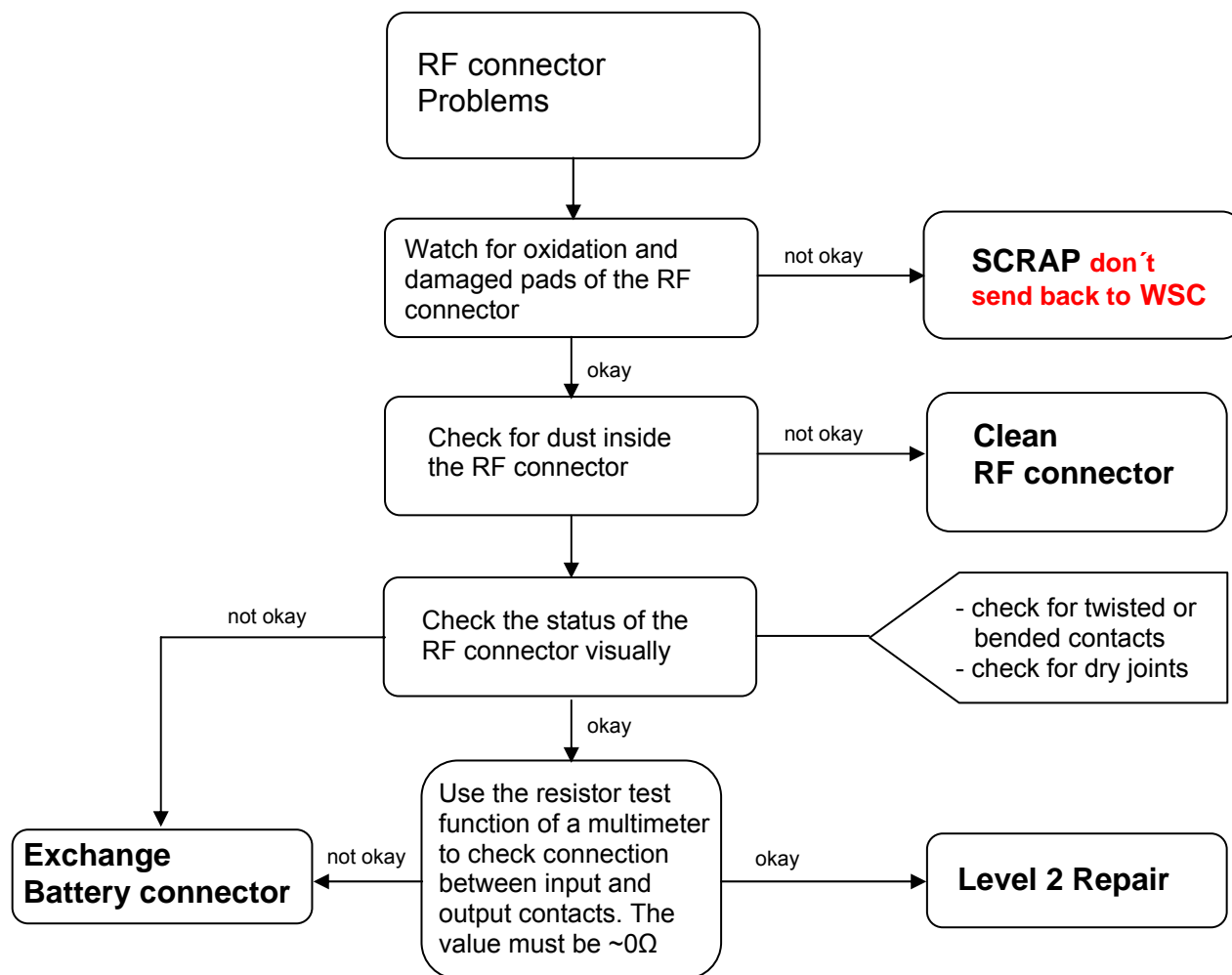
Connector ROTARY LCD MMI

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

E-commerce order number: L36334-Z97-C341
Soldering temperature: 240 - 255°C
IRIS Diagnose Code:
21000 Display / Performance
22000 Display / Background Illumination
32100 Keys / Main / No Function
32200 Keys / Main / Reduced Functionality
36000 Keys / Illumination

6 Connector RF Internal Antenna

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-C295

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

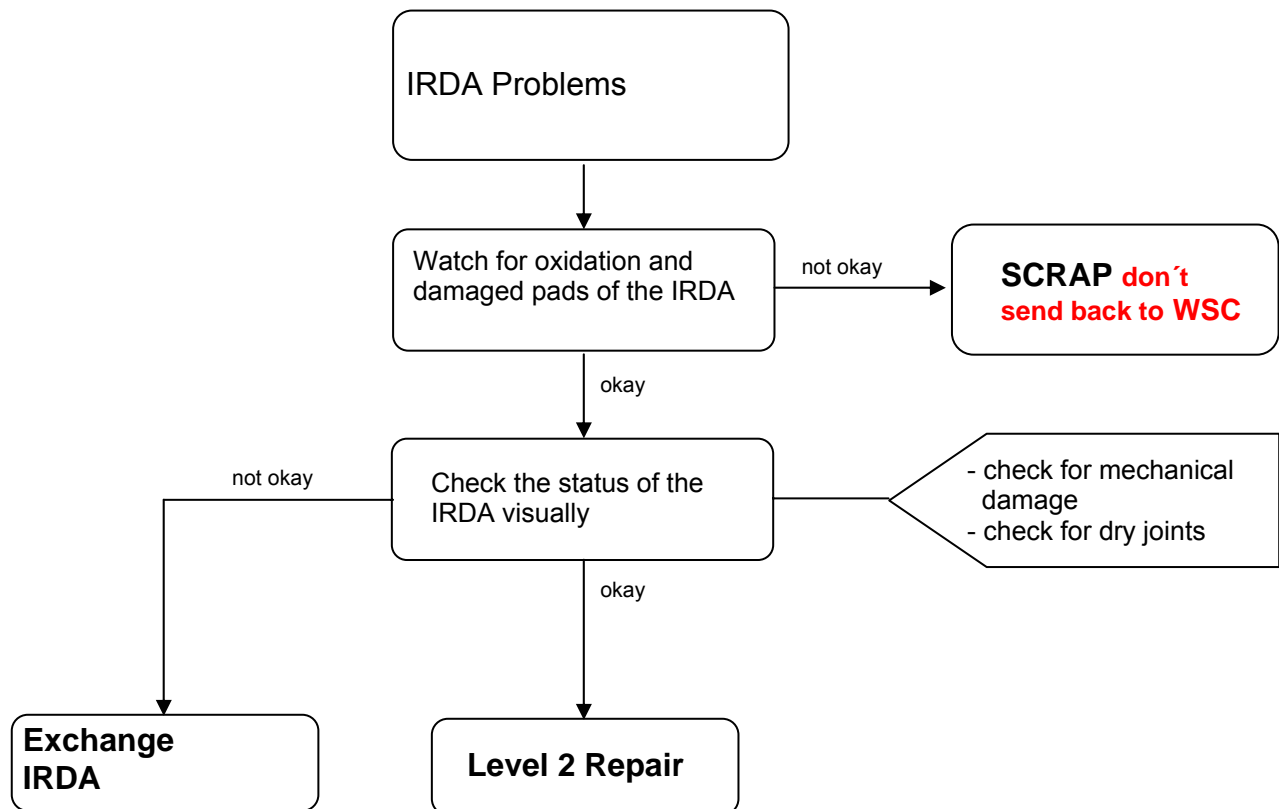
82200 Radio / Low Receiving Signal / Ext. Antenna

83200 Radio / Dropped Calls / Ext. Antenna

84200 Radio / Call Setup / Ext. Antenna

7 IRDA

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



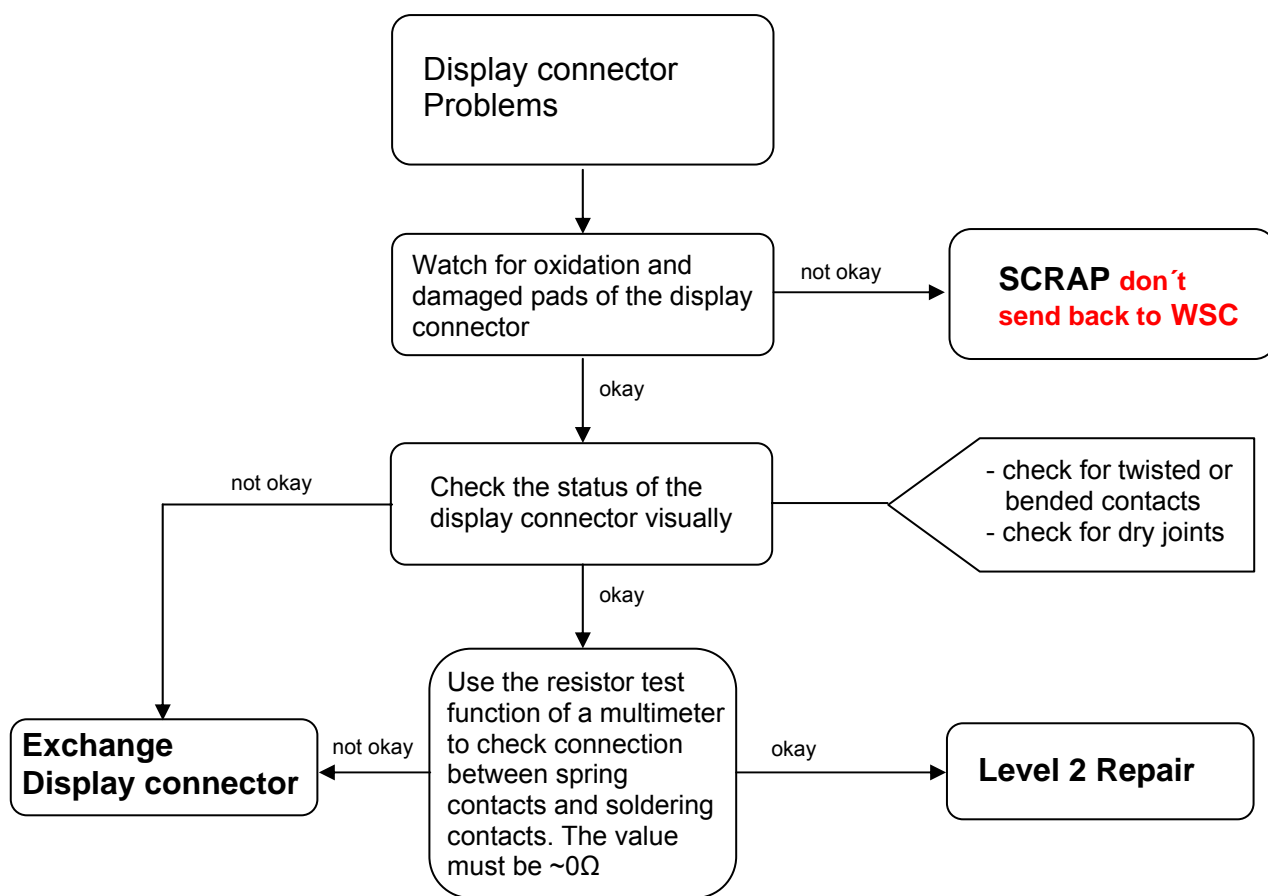
IRDA

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
Soldering temperature: 240 - 255°C
IRIS Diagnose Code: 41100 Interfaces / IRDA / No Function
41300 Interfaces / IRDA / Mechanical Damage

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



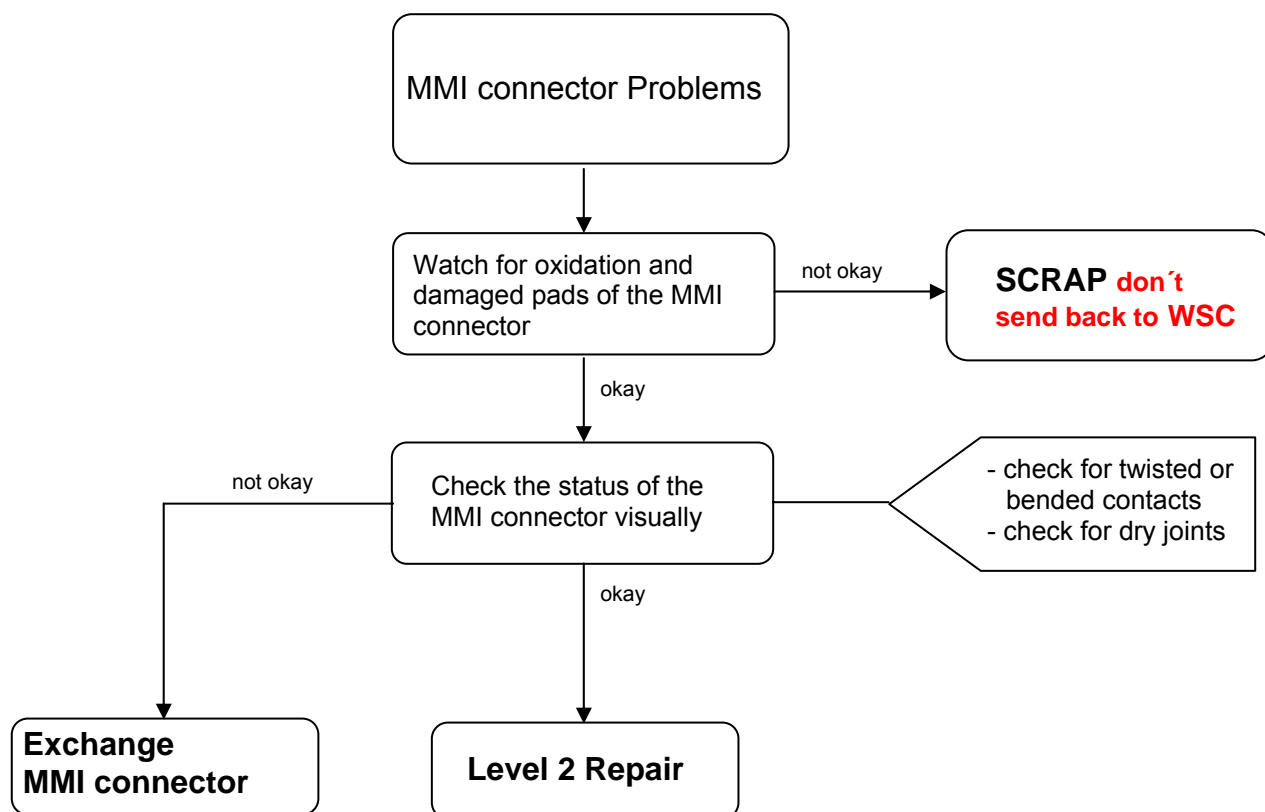
Connector DISPLAY

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 Connector MMI (Keypad)

Fault Symptoms	
Customer: Keyboard malfunction	GRT: Keyboard malfunction



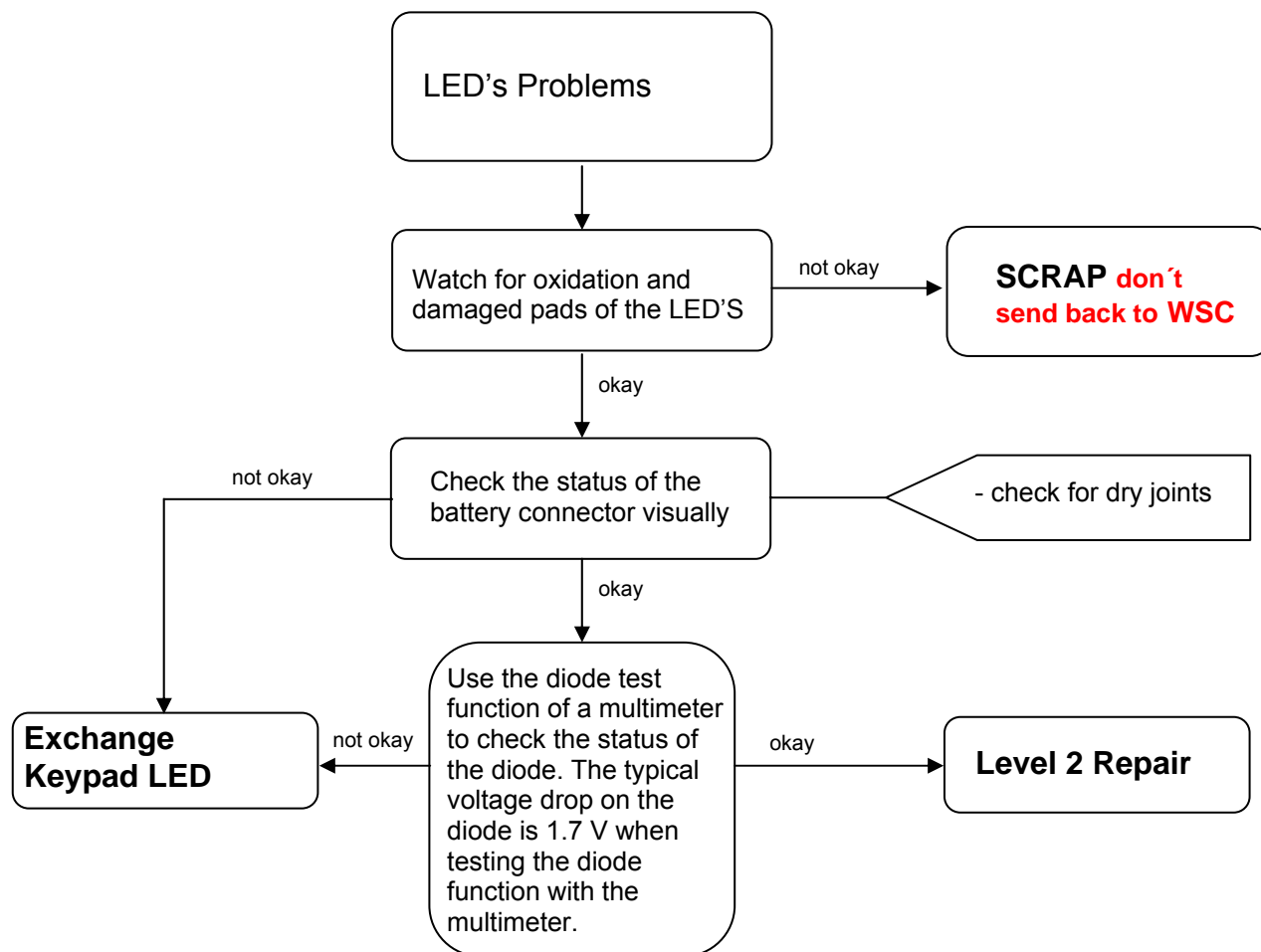
Connector MMI

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

E-commerce order number: L36334-Z97-C355
Soldering temperature: 240 - 255°C
IRIS Diagnose Code: 32100 Keys / Main / No Function
32200 Keys / Main / Reduced Functionality

10 LED KEYPAD-LIGHT

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



LED_ KEYPAD_ BACKLIGHT

Remove metal dome sheet before replace LED's Use soldering iron to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards. The metal dome jip must be used to place the metal dome sheet.

E-commerce order number: L36840-L2083-D670
Soldering temperature: 240 - 255°C
IRIS Diagnose Code: 22000 Display / Background Illumination