

Trouble Shooting Guide, Mechanical

Applicable for C905

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1 General

This document outlines the mechanical repairs that should be made in an attempt to fix the common failures that are seen in the field. To gain a complete understanding of how to test and repair a specific failure, this document should be used in conjunction with the Test Instructions, Mechanical and the Working Instructions, Mechanical.

NOTE! *A unit should always be inspected for liquid damage and flashed with latest Software Content Refresh before using the Mechanical Trouble Shooting Guide. Refer to the Mechanical Test Instructions for details regarding upgrading software.*

NOTE! *If all of the repair actions listed in this document for addressing a problem have been performed and a unit still is not working, handle the unit according to your local Sony Ericsson Representative.*

1.1 Service functions in the software

The service menu will be accessed with the following key combination. Use the joystick.

⇒*←←*←*

They are as follows:

Service info

Service tests

Text labels

The phones software has a built in service functionality that allows you to test some of the phones functions. (See *point 2 above*) It looks like this:

Main display

LED/illumination

Keyboard

Speaker

Earphone

Microphone (secondary)

Vibrating alert

Camera

Accelerometer

Memory card

FM radio (You need a headset to test)

Real time clock

Total call time

Security

GPS

NOTE: Different names may occur depending on language setting and customization.

1.2 Misuse and other no warranty issues

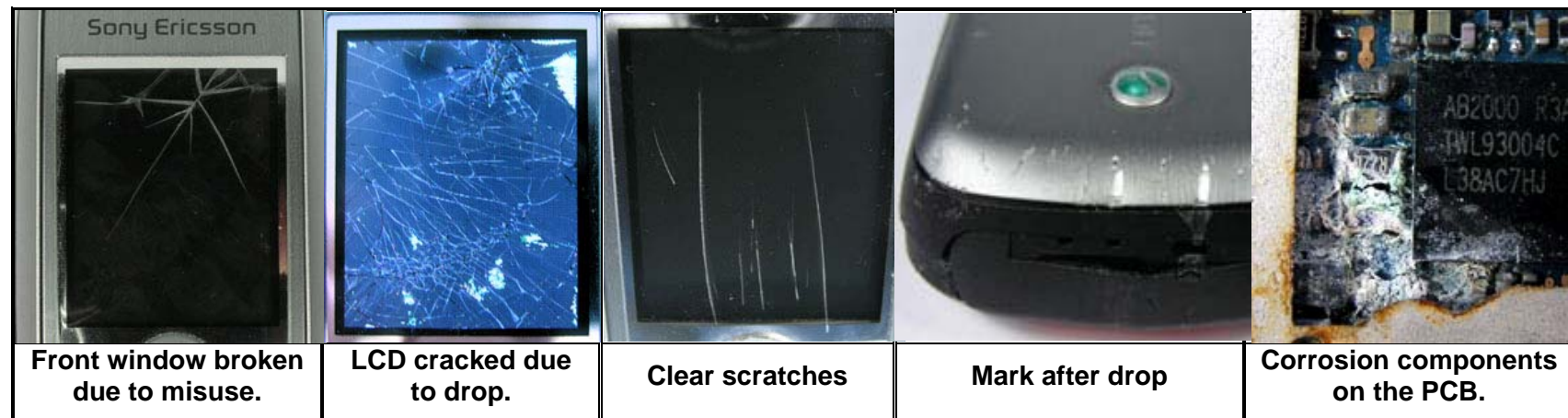
Misuse is not covered by warranty. This chapter will explain what's not covered by warranty. Phones that have been exposed to misuse will not be covered by warranty.


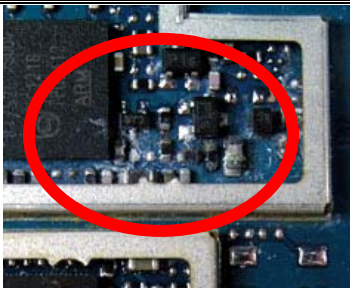
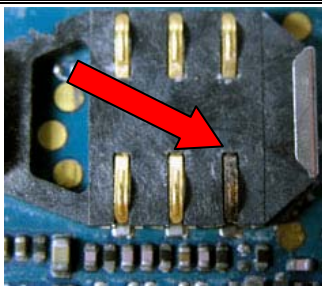
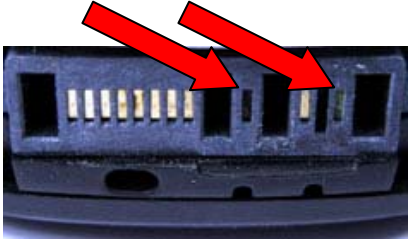
This means: if it is possible to repair the phone, the customer will have to pay for the repair. SEMC will not allow any of these phones to be claimed into WCMS. Some local perspectives may interfere with this. Please reference to local directives.

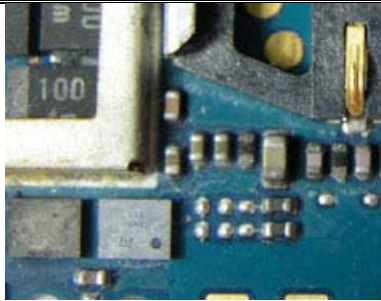
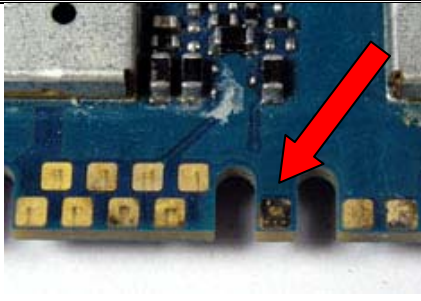
1.2.1 Action

Make a general visual inspection for misuse.

Below are some examples of what is not covered by warranty.



			
Corrosion components on the PCB.	Corrosion components on the PCB.	SIM reader damaged by liquid.	System connector damaged by liquid

	
Components around system connector damaged by liquid	System connector pad(s) damaged by liquid

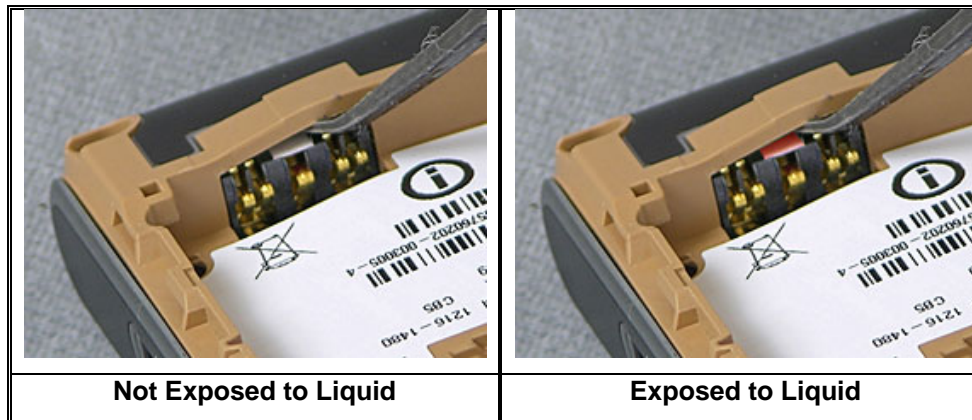
1.2.2 Liquid damage inspection

Before any tests are performed, an inspection of the liquid intrusion indicator should be made. If the liquid intrusion indicator is red, this is an indication of possible liquid exposure. If the liquid intrusion indicator suggests liquid exposure, please consult your local SEMC representative for handling instructions






Location of the liquid intrusion indicator

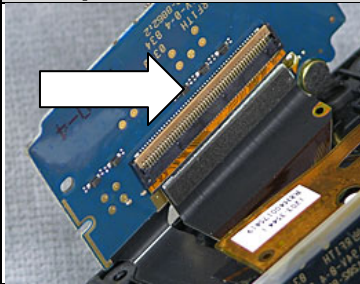
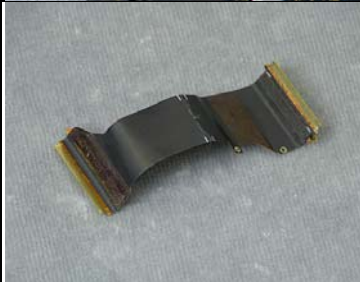
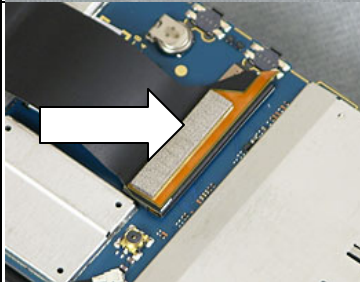
The following pictures show the difference between an indicator that has been in contact with liquid and one that has not.



2 Power Problems

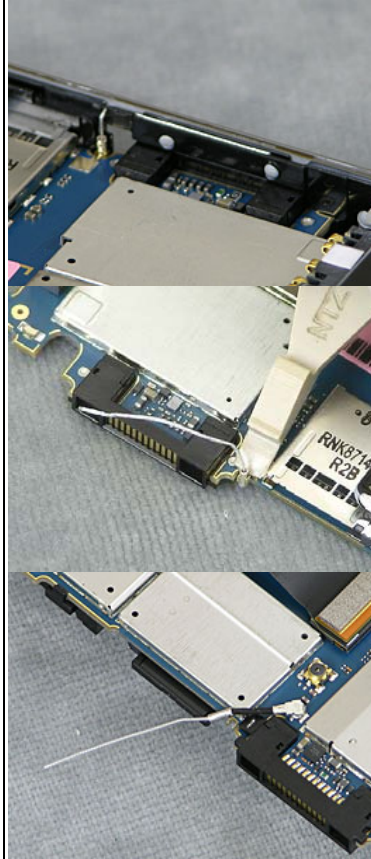
FIRST DO AN SOFTWARE CONTENT REFRESH

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Unit will not Power On	Check whether the phone vibrates when you press the power key and whether the keyboard illuminates after the phone vibrates	If activation of the vibrator and illumination of the keyboard are detected, refer to the “Display Problems” section	
	Inspect the battery connector	<ul style="list-style-type: none"> • If dirty or oxidized – Clean the connector’s contact pins • If adhesive is detected on the contact pins – use an eraser to rub off the adhesive • If damaged – Escalate to electrical repair 	
	Inspect the area around the power key	<ul style="list-style-type: none"> • If the Key On/Off is damaged, replace the Keyboard Navigation 	
	Inspect the Dome foil flip area	<ul style="list-style-type: none"> • If the Key On/Off is damaged replace the Dome foil flip 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Unit will not Power On (Cont)	Inspect the Slider FPC Assy connection to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> • If improperly connected – establish proper connection • If dirty or oxidized – Clean both halves of the connection • If the PBA Key Flex Flip Complete connector is damaged – replace the PBA Key Flex Flip Complete 	
	Inspect the Slider FPC Assy	<ul style="list-style-type: none"> • If damaged – replace the Slider FPC Assy 	
	Inspect the Slider FPC Assy connection to the main PBA connector	<ul style="list-style-type: none"> • If improperly connected – establish proper connection • If the main PBA connector is damaged – Escalate to an electrical repair level 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	

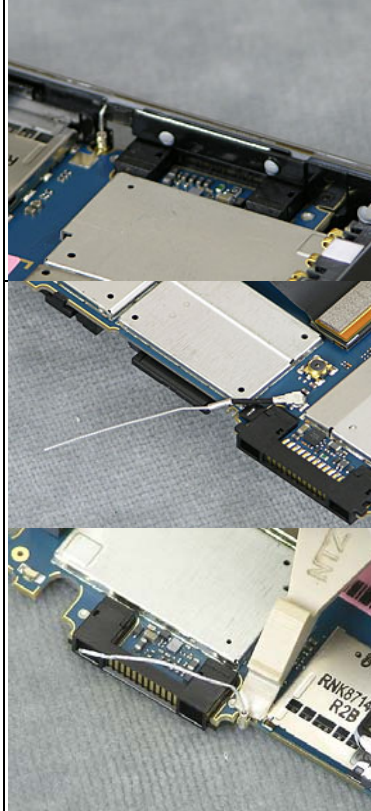
3 Bluetooth Problems

FIRST DO AN SOFTWARE CONTENT REFRESH

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Will not connect with a functional Bluetooth device	Inspect the Bluetooth antenna and its connection to the main PBA	<ul style="list-style-type: none"> If the BT antenna is damaged- replace the BT antenna Inspect that the wire is held by the BT antenna clip in proper position Inspect the antenna connection to the main PBA connector If improperly connected – establish proper connection If the main PBA connector is damaged - Escalate to an electrical repair level 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> Escalate to an electrical repair level 	



4 WLAN Problems

FIRST DO AN SOFTWARE CONTENT REFRESH


Problem Area	Items to Inspect	Repair Action	Inspection Reference
Will not connect with a functional WLAN access point	Inspect the Bluetooth/ WLAN antenna and its connection to the main PBA	<ul style="list-style-type: none"> If the BT antenna is damaged- replace the BT antenna Inspect that the wire is held by the BT antenna clip in proper position Inspect the antenna connection to the main PBA connector If improperly connected – establish proper connection If the main PBA connector is damaged - Escalate to an electrical repair level 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> Escalate to an electrical repair level 	

5 Charging/Capacity Problems

FIRST DO AN SOFTWARE CONTENT REFRESH


Problem Area	Items to Inspect	Repair Action	Inspection Reference
Phone is not charging properly	Inspect the battery connector	<ul style="list-style-type: none"> If dirty or oxidized, clean the battery connector's contact pins If damaged, escalate to an electrical repair level 	
	Inspect the system connector	<ul style="list-style-type: none"> If the system connector is dirty or oxidized, clean it If the system connector is damaged, escalate to an electrical repair level 	
	If the issue is not resolved→	<ul style="list-style-type: none"> Escalate to an electrical repair level 	

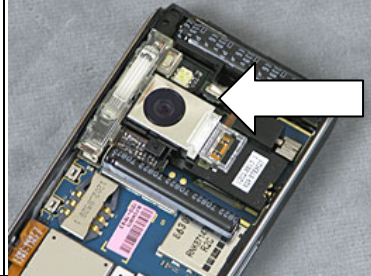
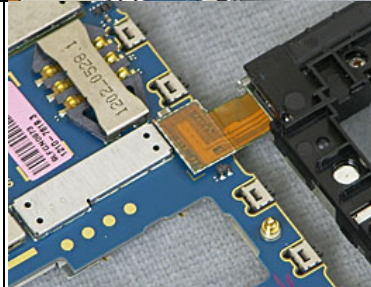
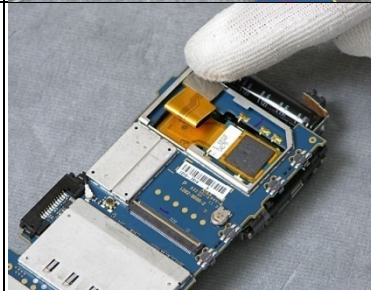
6 Data Transfer Problems using a Data Cable

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Problem transferring data using a direct connection	Inspect the system connector	<ul style="list-style-type: none"> If the system connector is dirty or oxidized, clean it If the system connector is damaged, escalate to an electrical repair level 	
	If the issue is not resolved→	<ul style="list-style-type: none"> Escalate to an electrical repair level 	

7 Camera Problems

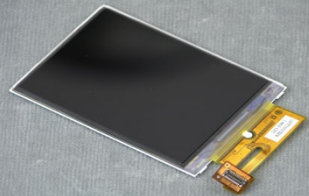
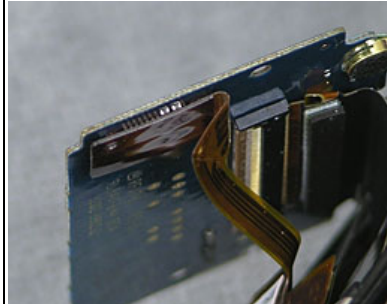
FIRST DO AN SOFTWARE CONTENT REFRESH

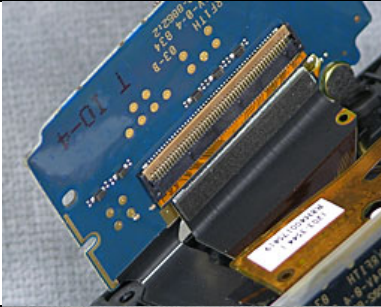
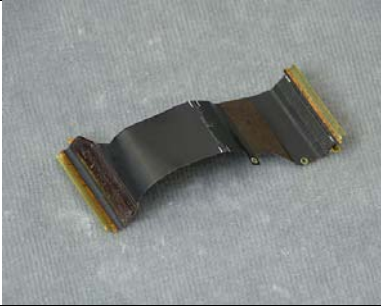
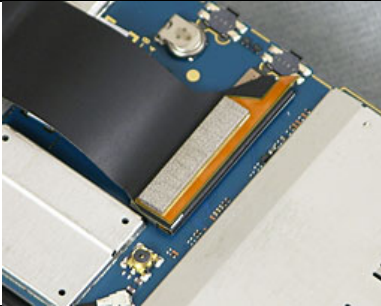
Problem Area	Items to Inspect	Repair Action	Inspection Reference
Camera not starting	Visually inspect the camera cover mechanism	<ul style="list-style-type: none"> If damaged replace the Cover Base Rear assembly 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Camera not starting (Cont)	Inspect the camera switch on the Flash complete	<ul style="list-style-type: none"> If damaged replace the Flash complete 	
	Inspect the Flash complete and its connection to the main PBA	<ul style="list-style-type: none"> If improperly connected – establish proper connection If the Flash complete or the connector are damaged - replace the Flash complete If the main PBA connector is damaged - Escalate to an electrical repair level 	
Camera not functioning properly	Inspect the Camera and its connection to the main PBA	<ul style="list-style-type: none"> If improperly connected – establish proper connection If the Camera connector damaged- replace the Camera If the main PBA connector damaged – Escalate to an electrical repair level Replace the Camera, if not working- Escalate to an electrical level 	
	If the issue has not been resolved→	<ul style="list-style-type: none"> Escalate to an electrical repair level 	

8 Display Problems


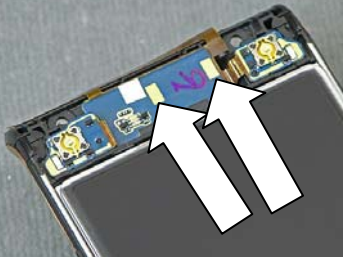
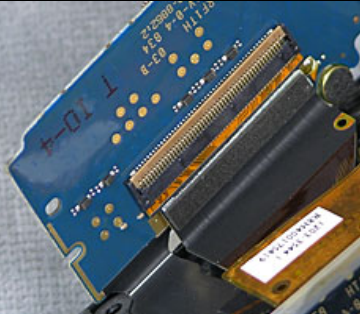
FIRST DO AN SOFTWARE CONTENT REFRESH


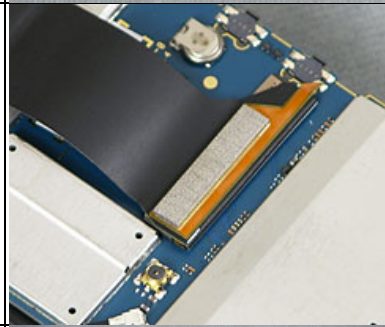
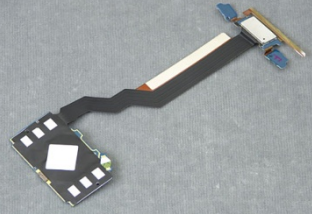
Problem Area	Items to Inspect	Repair Action	Inspection Reference
If display is not functioning	Check whether the phone vibrates when you press the power key and whether the navigation keypad illuminates after the phone vibrates	If activation of the vibrator and illumination of the navigation keypad are not detected, refer to the “Power Problems” section	
	Inspect the Display and its Flex Film	<ul style="list-style-type: none"> • If damaged – replace the Display • Replace the Display, if not working-go to next step 	
	Inspect the Display flex film's connection to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> • If improperly connected – establish proper connection • If dirty or oxidized – Clean both halves of the connection • If the display's portion of the connection is damaged – replace the LCD assembly • If the portion of the connection on the PBA Key Flex Flip Complete is damaged – replace the PBA Key Flex Flip Complete 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
	Inspect the Slider FPC Assy connection to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If improperly connected – establish proper connection If dirty or oxidized – Clean both halves of the connection If the PBA Key Flex Flip Complete connector is damaged – replace the PBA Key Flex Flip Complete 	
If display is not functioning (Cont)	Inspect the Slider FPC Assy	<ul style="list-style-type: none"> If damaged – replace the Slider FPC Assy 	
	Inspect the Slider FPC Assy connection to the main PBA connector	<ul style="list-style-type: none"> If improperly connected – establish proper connection If the main PBA connector is damaged – Escalate to an electrical repair level 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> Escalate to an electrical repair level 	
Display is not illuminating properly	Refer to the “Illumination Problems” section of this document		

9 Ear Speaker (Receiver) Problems


FIRST DO AN SOFTWARE CONTENT REFRESH

Problem Area	Items to Inspect	Repair Action	Inspection Reference
No sound or poor quality sound	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Inspect the Ear Speaker's external port	<ul style="list-style-type: none"> If clogged – Replace the front cover 	
	Inspect the two pads where the Ear Speaker connects to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If one or both of the connections between the Ear Speaker and the PBA Key Flex Flip Complete are dirty or damaged – Clean and/or replace the Ear Speaker and the PBA Key Flex Flip Complete as necessary Replace the Ear Speaker, if not working- go to next step 	
	Inspect the Slider FPC Assy connection to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If improperly connected – establish proper connection If dirty or oxidized – Clean both halves of the connection If the PBA Key Flex Flip Complete connector is damaged – replace the PBA Key Flex Flip Complete 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
No sound or poor quality sound (Cont)	Inspect the Slider FPC Assy	<ul style="list-style-type: none"> If damaged – replace the Slider FPC Assy 	
	Inspect the Slider FPC Assy connection to the main PBA connector	<ul style="list-style-type: none"> If improperly connected – establish proper connection If the main PBA connector is damaged – Escalate to an electrical repair level 	
	Inspect the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If damaged replace the PBA Key Flex Flip Complete Replace the PBA Key Flex Flip Complete - if not working- go to next step 	
	If the issue remains unresolved →	<ul style="list-style-type: none"> Escalate to an electrical repair level 	

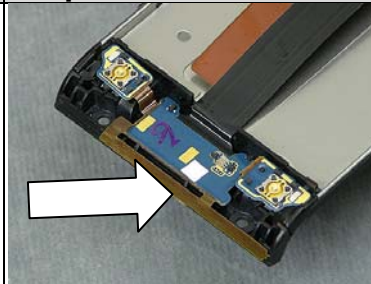
10 FM Radio Problems

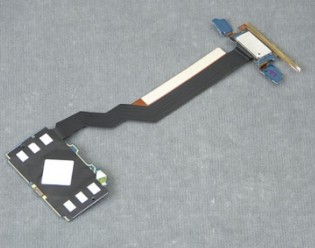
FIRST DO AN SOFTWARE CONTENT REFRESH

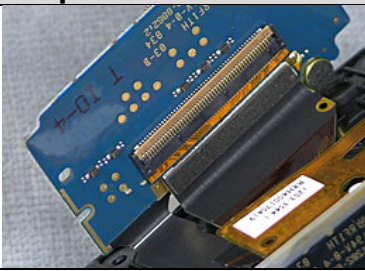

Problem Area	Items to Inspect	Repair Action	Inspection Reference
FM Radio not working	Perform the following action→	<ul style="list-style-type: none"> • If the system connector is dirty or oxidized, clean it • If the system connector is damaged, escalate to an electrical repair level 	
	If the issue is not resolved→	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	

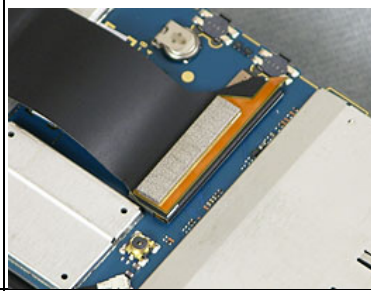
11 GPS Problems

FIRST DO AN SOFTWARE CONTENT REFRESH


Problem Area	Items to Inspect	Repair Action	Inspection Reference
GPS not functioning	Inspect the GPS antenna	<ul style="list-style-type: none"> • If the GPS antenna is damaged, replace the PBA Key Flex Flip Complete 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
	Inspect the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If damaged replace the PBA Key Flex Flip Complete Replace the PBA Key Flex Flip Complete - if not working- go to next step 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
GPS not functioning (Cont)	Inspect the Slider FPC Assy connection to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If improperly connected – establish proper connection If dirty or oxidized – Clean both halves of the connection If the PBA Key Flex Flip Complete connector is damaged – replace the PBA Key Flex Flip Complete 	
	Inspect the Slider FPC Assy	<ul style="list-style-type: none"> If damaged – replace the Slider FPC Assy 	


	Inspect the Slider FPC Assy connection to the main PBA connector	<ul style="list-style-type: none"> • If improperly connected – establish proper connection • If the main PBA connector is damaged – Escalate to an electrical repair level 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	

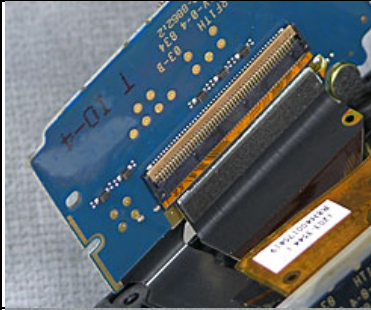
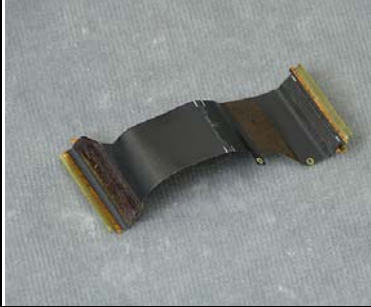
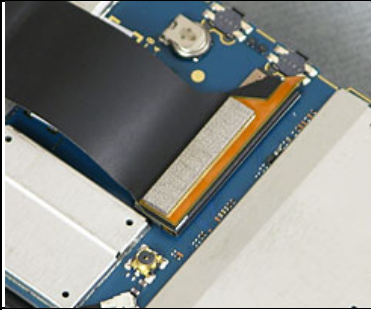
12 Hands-Free Problems


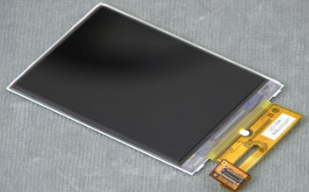
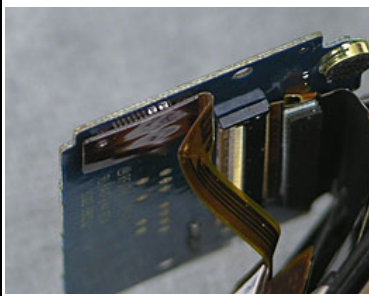
Problem Area	Items to Inspect	Repair Action	Inspection Reference
Hands-free not working	Perform the following action→	<ul style="list-style-type: none"> • If the system connector is dirty or oxidized, clean it • If the system connector is damaged, escalate to an electrical repair level 	
	If the issue is not resolved→	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	

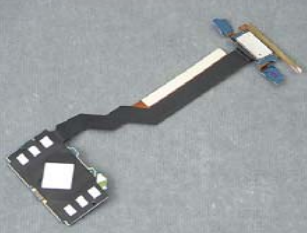
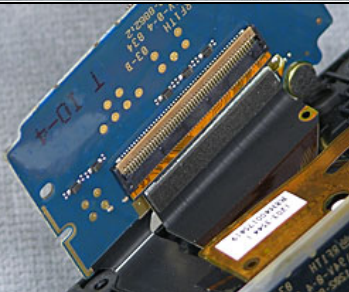

13 Illumination Problems

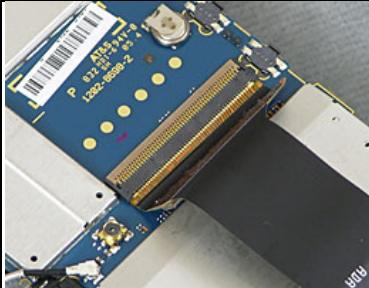
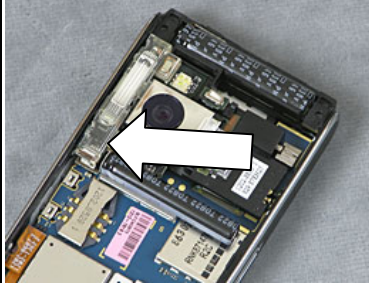
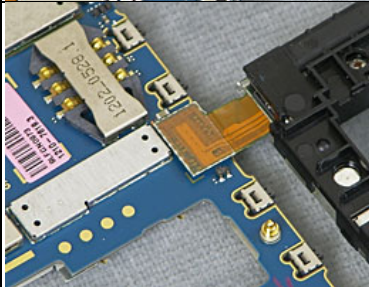
FIRST DO AN SOFTWARE CONTENT REFRESH

Problem Area	Items to Inspect	Repair Action	Inspection Reference
The navigation keypad and/or A/B Keys illumination problem	Before proceeding →	<ul style="list-style-type: none"> • Perform a setting reset 	
	Inspect the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> • If damaged replace the PBA Key Flex Flip Complete, if not working- go to next step 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
The navigation keypad and/or A/B Keys illumination problem (Cont)	Inspect the Slider FPC Assy connection to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> • If improperly connected – establish proper connection • If dirty or oxidized – Clean both halves of the connection • If the PBA Key Flex Flip Complete connector is damaged – replace the PBA Key Flex Flip Complete 	
	Inspect the Slider FPC Assy	<ul style="list-style-type: none"> • If damaged – replace the Slider FPC Assy 	
	Inspect the Slider FPC Assy connection to the main PBA connector	<ul style="list-style-type: none"> • If improperly connected – establish proper connection • If the main PBA connector is damaged – Escalate to an electrical repair level 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Keypad numeric and/or Camera Key Illumination problems	Perform the following action →	<ul style="list-style-type: none"> Replace the Numeric Key Foil 	
	If the issue has not been resolved →	<ul style="list-style-type: none"> Escalate to an electrical repair level 	
Display Illumination:	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Inspect the Display and its Flex Film	<ul style="list-style-type: none"> If damaged – replace the Display Replace the Display, if not working- go to next step 	
	Inspect the Display flex film's connection to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If improperly connected – establish proper connection If dirty or oxidized – Clean both halves of the connection If the display's portion of the connection is damaged – replace the Display If the portion of the connection on the PBA Key Flex Flip Complete is damaged – replace the PBA Key Flex Flip Complete 	

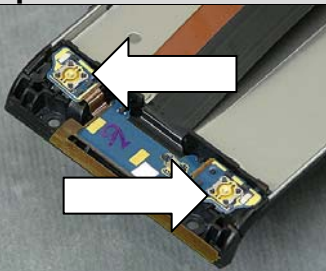
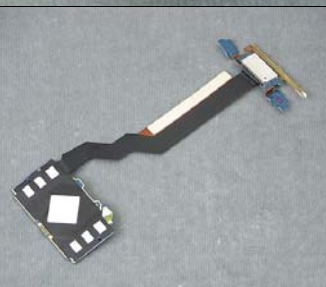

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Display Illumination (Cont)	Inspect the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If damaged replace the PBA Key Flex Flip Complete 	
	Inspect the Slider FPC Assy connection to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If improperly connected – establish proper connection If dirty or oxidized – Clean both halves of the connection If the PBA Key Flex Flip Complete connector is damaged – replace the PBA Key Flex Flip Complete 	
	Inspect the Slider FPC Assy	<ul style="list-style-type: none"> If damaged – replace the Slider FPC Assy 	

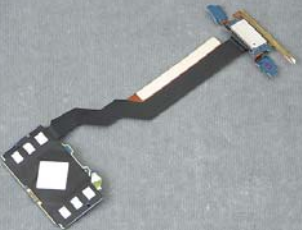


Problem Area	Items to Inspect	Repair Action	Inspection Reference
Display Illumination (Cont)	Inspect the Slider FPC Assy connection to the main PBA connector	<ul style="list-style-type: none"> If improperly connected – establish proper connection If the main PBA connector is damaged – Escalate to an electrical repair level 	
	Plug in a good Display and see if the problem is resolved	<ul style="list-style-type: none"> If the problem is resolved – install a new Display 	
	If the issue is not resolved →	<ul style="list-style-type: none"> Escalate to an electrical repair level 	
Xenon Flash	Inspect the Flash complete and its connection to the main PBA	<ul style="list-style-type: none"> If improperly connected – establish proper connection If the Flash complete or the connector damaged- replace the Flash complete If the main PBA connector is damaged - Escalate to an electrical repair level 	
Tally LED problems			
	If the issue is not resolved →	<ul style="list-style-type: none"> Escalate to an electrical repair level 	


14 Key Problems





FIRST DO AN SOFTWARE CONTENT REFRESH

Note: Key does not work: Always restart the phone before testing the keys!

Problem Area	Items to Inspect	Repair Action	Inspection Reference
A/B Buttons: One or both of the A/B buttons are not functioning or intermittent	Visually inspect for debris between and/or damage to the key and the switch of the A/B button in question	<ul style="list-style-type: none"> • If dirty – Clean both parts • If damaged – Replace the A/B button and/or the PBA Key Flex Flip Complete as necessary 	
	If the issue is not resolved→	<ul style="list-style-type: none"> • Replace the PBA Key Flex Flip Complete, if it has not already been replaced 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	
Keyboard Navigation: is not functioning or is intermittent	Visually inspect for debris between and/or damage to the Navigation Keyboard and its Dome Foil.	<ul style="list-style-type: none"> • If dirty – Clean both parts • If damaged – Replace the Keyboard navigation and/or Dome Foil Flip 	


Problem Area	Items to Inspect	Repair Action	Inspection Reference
Keyboard Navigation: is not functioning or is intermittent (Cont)	If the issue is not resolved→	<ul style="list-style-type: none"> Replace the PBA Key Flex Flip Complete, if it has not already been replaced 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> Escalate to an electrical repair level 	
Numeric Keyboard: The entire numeric keyboard or a portion of the numeric keyboard is not functioning or is intermittent	Inspect the Numeric Key Foil connection to Main PBA	<ul style="list-style-type: none"> If the connector is improperly connected – Reestablish proper connection If the connection is dirty – Clean both halves of that connection If the Numeric Key Foil connector is damaged – replace the Numeric Key Foil If the main PBA connector is damaged - Escalate to an electrical repair level 	 
	If the issue is still not resolved→	<ul style="list-style-type: none"> Escalate to an electrical repair level 	
Numeric Keyboard: Scratched	Visually inspect the Numeric Keyboard for scratches	<ul style="list-style-type: none"> Replace the Numeric Keyboard and the Protection tape 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Camera Key:	<p>Inspect the Numeric Key Foil connection to Main PBA</p>	<ul style="list-style-type: none"> • If the connector is improperly connected – Reestablish proper connection • If the connection is dirty – Clean both halves of that connection • If the Numeric Key Foil connector is damaged – replace the Numeric Key Foil • If the main PBA connector is damaged - Escalate to an electrical repair level 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Mode Key:	Visually inspect for debris between and/or damage to the key and the switch of the Mode Key	<ul style="list-style-type: none"> • If dirty – Clean both parts • If damaged – Replace the Mode Key • If the main PBA switches are damaged- escalate to an electrical repair level 	 
Volume key:	Visually inspect for debris between and/or damage to the key and the switch of the Mode Key	<ul style="list-style-type: none"> • If dirty – Clean both parts • If damaged – Replace the Mode Key • If the main PBA switches are damaged- escalate to an electrical repair level 	 
	If the issue is still not resolved→	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	

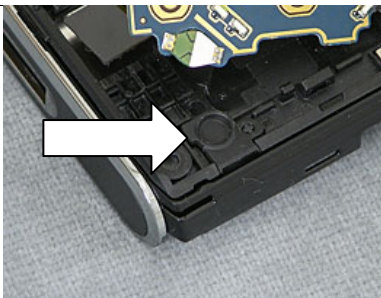
15 Memory Card Problems

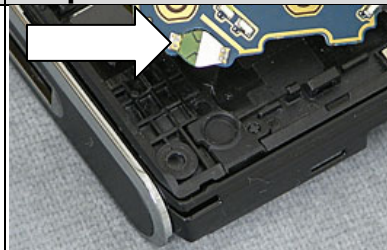
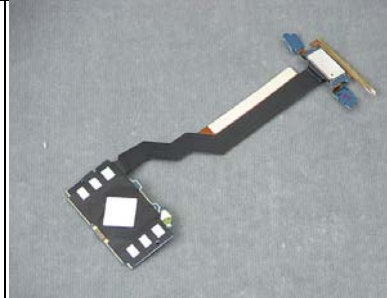
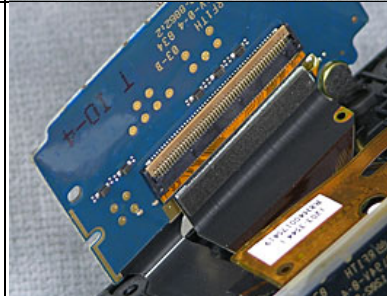
FIRST DO AN SOFTWARE CONTENT REFRESH


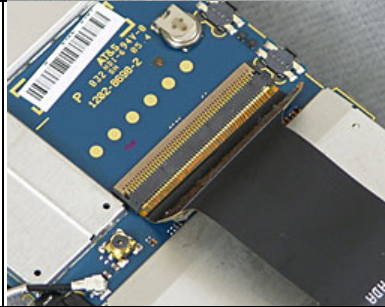
Problem Area	Items to Inspect	Repair Action	Inspection Reference
Memory card undetected	Inspect the memory card reader	<ul style="list-style-type: none"> If dirty or oxidized, clean If damaged- Escalate to an electrical repair level 	
	If the issue is still not resolved →	<ul style="list-style-type: none"> Escalate to an electrical repair level 	

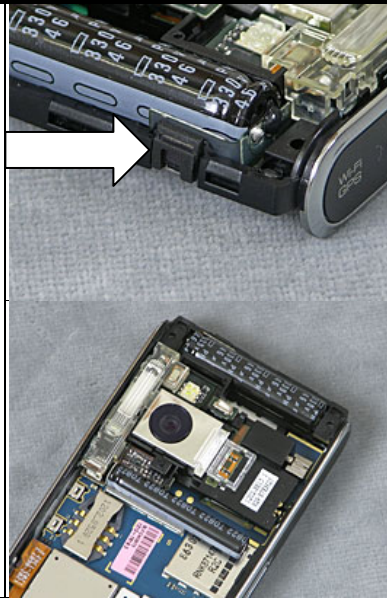
16 Microphone Problems

FIRST DO AN SOFTWARE CONTENT REFRESH


Problem Area	Items to Inspect	Repair Action	Inspection Reference
Main Microphone	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Inspect the microphone's Gasket	<ul style="list-style-type: none"> If clogged or damaged replace the Microphone's Gasket 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Main Microphone (Cont)	Inspect the Microphone	<ul style="list-style-type: none"> If damaged – replace the PBA Key Flex Flip Complete 	
	Inspect the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If damaged replace the PBA Key Flex Flip Complete 	
	Inspect the Slider FPC Assy connection to the PBA Key Flex Flip Complete	<ul style="list-style-type: none"> If improperly connected – establish proper connection If dirty or oxidized – Clean both halves of the connection If the PBA Key Flex Flip Complete connector is damaged – replace the PBA Key Flex Flip Complete 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Main Microphone (Cont)	Inspect the Slider FPC Assy	<ul style="list-style-type: none"> If damaged – replace the Slider FPC Assy 	
	Inspect the Slider FPC Assy connection to the main PBA connector	<ul style="list-style-type: none"> If improperly connected – establish proper connection If the main PBA connector is damaged – Escalate to an electrical repair level 	
	If the issue is still not resolved →	<ul style="list-style-type: none"> Escalate to an electrical repair level 	


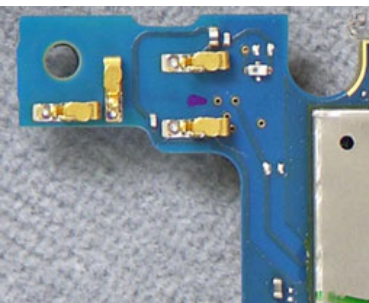
Problem Area	Items to Inspect	Repair Action	Inspection Reference
Secondary Microphone	Inspect the Flash complete and its connection to the main PBA	<ul style="list-style-type: none"> • If improperly connected – establish proper connection • If the Flash complete or the connector damaged- replace the Flash complete • If the main PBA connector is damaged - Escalate to an electrical repair level 	
	If the issue is still not resolved →	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	

17 Opening/Closing Problems

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Phone does not slide open/closed smoothly	Perform the following →	<ul style="list-style-type: none"> • Replace the hinge assembly 	


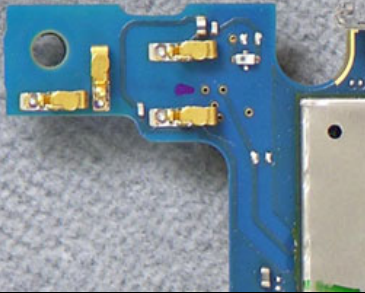
18 Network/Signal Problems

FIRST DO AN SOFTWARE CONTENT REFRESH

Problem Area	Items to Inspect	Repair Action	Inspection Reference
No Signal or Poor Signal	Inspect the Loudspeaker Assembly connection pads	<ul style="list-style-type: none"> • If dirty or oxidized, clean • If damaged- Replace the Loudspeaker Assembly 	
	Inspect the Loudspeaker Assembly connection to the main PBA	<ul style="list-style-type: none"> • If the connectors on the circuit board are damaged, escalate to an electrical repair level 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> • Escalate to an electrical repair level 	


19 Speaker Problems

FIRST DO AN SOFTWARE CONTENT REFRESH

Problem Area	Items to Inspect	Repair Action	Inspection Reference
No sound or poor quality sound	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Inspect the Loudspeaker Assembly connection pads	<ul style="list-style-type: none"> If dirty or oxidized, clean If damaged- Replace the Loudspeaker Assembly 	
	Inspect the Loudspeaker Assembly connection to the main PBA	<ul style="list-style-type: none"> If the connectors on the circuit board are damaged, escalate to an electrical repair level 	
	If the issue is still not resolved→	<ul style="list-style-type: none"> Escalate to an electrical repair level 	

20 SIM Problems


FIRST DO AN SOFTWARE CONTENT REFRESH

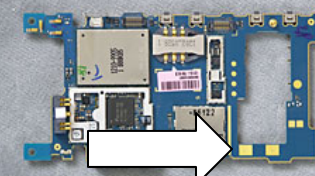
Problem Area	Items to Inspect	Repair Action	Inspection Reference
SIM undetected	Inspect the SIM Card Reader	<ul style="list-style-type: none"> If dirty or oxidized, clean SIM Card Reader If damaged, escalate to an electrical repair level 	
	If the issue is not resolved →	<ul style="list-style-type: none"> Escalate to an electrical repair level 	
Unit indicates the incorrect SIM is inserted	Check whether the phone is locked to a particular carrier and whether the correct carrier's SIM is being used	<ul style="list-style-type: none"> Use Correct Carrier SIM or test SIM 	

21 Vibrator Problems

FIRST DO AN SOFTWARE CONTENT REFRESH

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Vibrator not	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
working	Perform the following action →	<ul style="list-style-type: none"> Replace the vibrator 	

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Vibrator not working (Cont)	Inspect the vibrator connection pads on the main PBA	<ul style="list-style-type: none"> If dirty, clean If damaged, escalate to an electrical repair level 	
	If the issue is still not resolved →	<ul style="list-style-type: none"> Escalate to an electrical repair level 	

22 Accelerometer Problems

FIRST DO AN SOFTWARE CONTENT REFRESH

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Accelerometer not working properly	Perform the following →	<ul style="list-style-type: none"> Escalate to an electrical repair level 	

23 Real Time Clock Problems

Problem Area	Items to Inspect	Repair Action	Inspection Reference
Real Time Clock not working properly	Perform the following →	<ul style="list-style-type: none">Escalate to an electrical repair level	

24 Software Problems

- If there are problems with the response of the keypad commands, or spelling errors in the menu, if they are not related to mechanical damage, make a master reset and flash the phone with the latest software from EMMA.
- Checking the software revision can be done in the Service info, see chapter *Service functions in the software*.
Choose: Service info / SW information.
The Software revision and date will be shown in the display.

Note: Do a SW upgrade before sending the unit to a higher level. Do not scrap a phone that hasn't been upgraded.

If the failure still occurs, handle the unit according to the local directives.

25 Revision History

Rev.	Date	Changes / Comments
1	2008-10-24	First release
2	2008-12-01	Chapter 14 updated with new problem area: "Numeric Keyboard: Scratched".
3	2009-02-09	Chapter 9 updated with "Inspect the PBA Key Flex Flip Complete"
4	2009-09-22	Added Software Content Refresh update to each chapter.