

Trouble Shooting Guide, Electrical

Applicable for J220 and J230

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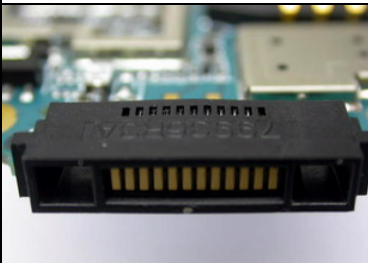
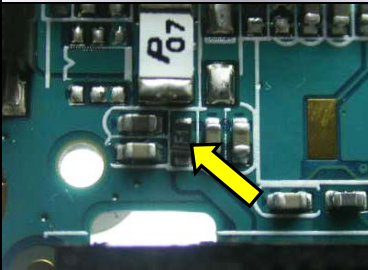

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1 General

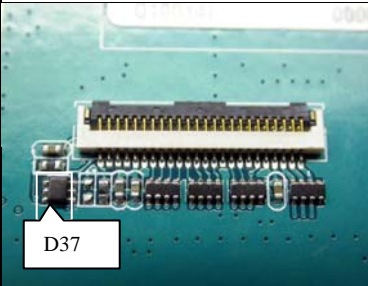
The purpose of this document is to provide a sequence of repair actions associated with different failure modes. The repair actions are listed in order of their probability of creating a successful repair. The first action has the highest probability, and subsequent actions have lower probabilities. The intention is for the repair technician to implement the first repair action and then retest the phone. If the phone continues to fail the same test, then the technician should continue to the second repair action. If the phone continues to fail the same test after all of the repair actions are exhausted, then the phone will be considered not reparable at this level.

This document should be used only after the steps specified in the Mechanical Trouble Shooting Guide have been exhausted for the given problem area.

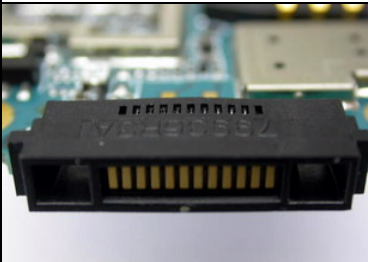
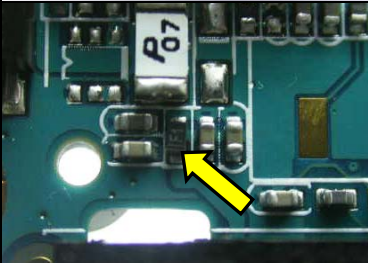
2 Power Problems

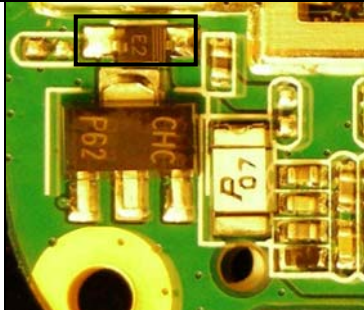
Problem Area	Items to Check	Repair Action	Reference Image
No Power On	Visually inspect the components as follows.	<ul style="list-style-type: none"> • If dirty – Clean • If oxidized or defective – Replace 	
	Investigate into J13	<ul style="list-style-type: none"> • If can't power on – Replace J13 	
	Investigate into D31	<ul style="list-style-type: none"> • If can't power on – Replace 31 	
	Investigate into U4	<ul style="list-style-type: none"> • If can't power on – Replace U4 	

3 Display Problems

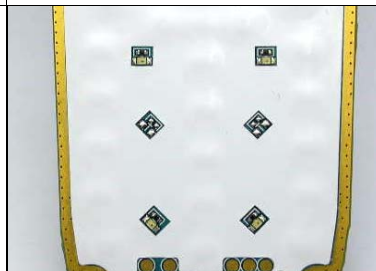
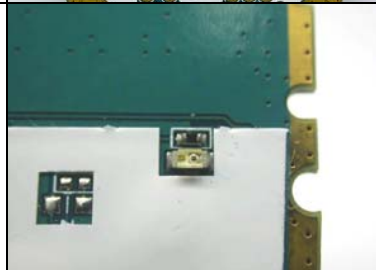
Problem Area	Items to Check	Repair Action	Reference Image
	Visually inspect the components as follows.	<ul style="list-style-type: none"> If dirty – Clean If oxidized or defective – Replace 	
	Investigate into J1	<ul style="list-style-type: none"> If no display – Replace J1 	
		<ul style="list-style-type: none"> Replace D37 	

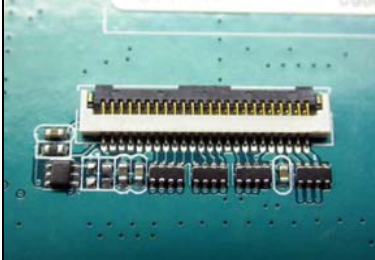
4 Charging/Capacity Problems

Problem Area	Items to Check	Repair Action	Reference Image
	Visually inspect the components as follows.	<ul style="list-style-type: none"> If dirty – Clean If oxidized or defective – Replace 	
	Investigate into J13	<ul style="list-style-type: none"> If can't charge – Replace J13 	
	Investigate into D31	<ul style="list-style-type: none"> If can't charge – Replace D31 	


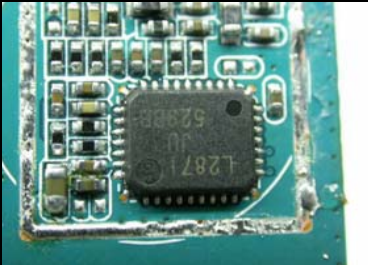
Problem Area	Items to Check	Repair Action	Reference Image
	Investigate into D41	<ul style="list-style-type: none"> If can't charge – Replace D41 	

5 Illumination Problems

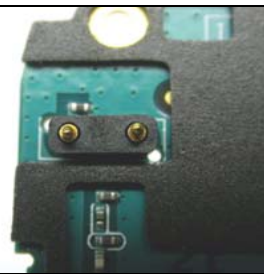
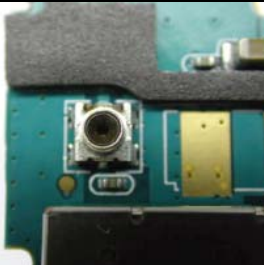
Problem Area	Items to Check	Repair Action	Reference Image
Illumination LED	Visually inspect the components as follows.	<ul style="list-style-type: none"> If dirty – Clean If oxidized or defective – Replace 	
	Investigate into LEDK1, LEDK 2, LEDK 5, LEDK 6,	<ul style="list-style-type: none"> If no back light – Replace LEDK1, LEDK 2, LEDK 5, LEDK 6, 	
	Investigate into LEDK17	<ul style="list-style-type: none"> If Led no Display – Replace LEDK17 	
Illumination Display	Visually inspect the components as follows.	<ul style="list-style-type: none"> If dirty – Clean If oxidized or defective – Replace 	

Problem Area	Items to Check	Repair Action	Reference Image
	Investigate into J1	<ul style="list-style-type: none"> If no top LED light – Replace J1 	


6 Audio Problems

Problem Area	Items to Check	Repair Action	Reference Image
	Visually inspect the components as follows.	<ul style="list-style-type: none"> If dirty – Clean If oxidized or defective – Replace 	
	Investigate into J9	<ul style="list-style-type: none"> If no sound – Replace J9 	
	Investigate into U33	<ul style="list-style-type: none"> If no sound – Replace U33 	

7 Network/Signal Problems

Problem Area	Items to Check	Repair Action	Reference Image
	Visually inspect the components as follows.	<ul style="list-style-type: none"> • If dirty – Clean • If oxidized or defective – Replace 	
	Investigate into J14	<ul style="list-style-type: none"> • If no network or poor network – Replace J14 	
	Investigate into J5	<ul style="list-style-type: none"> • If no network or poor network – Replace J5 	

8 SIM Problems

Problem Area	Items to Check	Repair Action	Reference Image
	Visually inspect the components as follows.	<ul style="list-style-type: none"> • If dirty – Clean • If oxidized or defective – Replace 	
	Investigate into J2	<ul style="list-style-type: none"> • If display “Insert SIM “–Replace J2 	
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 	

9 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 III.
- 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 has not been upgraded.

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

10 Revision History

Rev.	Date	Changes / Comments
1	2006-03-08	Initial Release
2	2007-11-20	D37 and D41 added