

Trouble Shooting Guide, Mechanical

Applicable for J210i

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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.





2 Appearance Problems

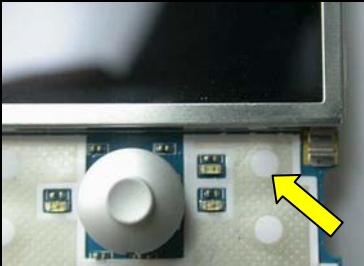
Problem Area	Items to Check	Repair Action	Reference Image
Appearance	Visually inspect the cosmetic quality of all user viewable surfaces	<ul style="list-style-type: none"> • If dirty – Clean • If unacceptably scratched or damaged – Replace parts that are unacceptable 	
	Visually inspect all keys	<ul style="list-style-type: none"> • If dirty – Clean • If unacceptably damaged – Replace 	
	Visually inspect for improper gap between seams	<ul style="list-style-type: none"> • Reassemble or replace damaged parts as necessary 	

3 Power Problems

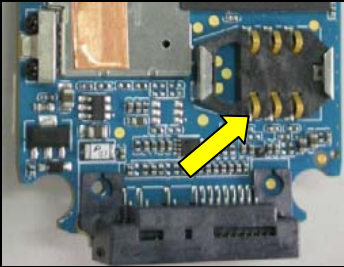

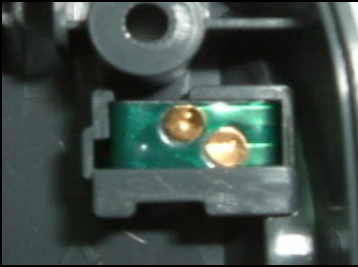

Insert a regular functionality Battery and connect a Charger to the phone. If the Battery voltage is too low, the phone will charge the Battery without turning on the phone. (It takes less than 10 minutes) While the Battery voltage is high enough to turn on the phone, it will show “charging only” on the LCD.

During trickle charging the Red Led behind the ON/OFF button is lid. When the phone goes over to normal charging, the Red Led will indicate nothing, it will be turned off.





Problem Area	Items to Check	Repair Action	Reference Image
No Power On	Check whether the phone Keypad illuminated	<ul style="list-style-type: none"> If activation of the Keypad are detected, refer to the “Display Problems” section 	
	Visually inspect contact pads on Battery	<ul style="list-style-type: none"> If dirty or oxidized – Clean pads If damaged – Replace Battery 	
	Visually inspect Battery Connector	<ul style="list-style-type: none"> If dirty or oxidized – Clean If damaged – Replace Battery Connector If can't power on – Replace Battery Connector 	
	Visually inspect Battery Connector pads	<ul style="list-style-type: none"> If dirty or oxidized – Clean pads 	
	Visually inspect the power key portion of the Keypad for debris or damage	<ul style="list-style-type: none"> If dirty – Clean If damaged – Replace Keypad 	


Problem Area	Items to Check	Repair Action	Reference Image
	Visually inspect the power contact portion of the Dome Foil	<ul style="list-style-type: none"> • If dirty – Clean • If damaged – Replace Dome Foil 	
	If the issue has not been resolved→	<ul style="list-style-type: none"> • Replace the Keypad and the Dome Foil, if they have not already been replaced 	

4 Network/Signal Problems

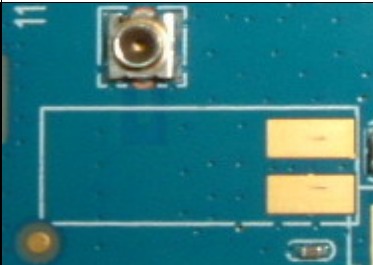
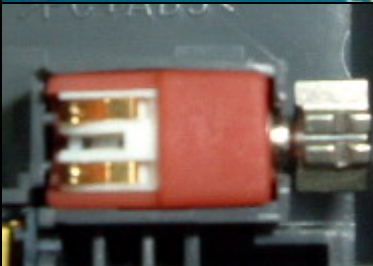


Problem Area	Items to Check	Repair Action	Reference Image
No Signal or Poor Signal	Visually inspect SIM holder	<ul style="list-style-type: none"> • If dirty or – Clean • If damaged – Send to an electrical repair location 	
	Visually inspect the Antenna Connector	<ul style="list-style-type: none"> • If dirty or oxidized – Clean • If damaged – Send to an electrical repair location 	
	Visually inspect the Antenna Insert	<ul style="list-style-type: none"> • If dirty or oxidized – Clean • If damaged – Replace Frame Assy 	
	Visually inspect the Antenna Flex Film	<ul style="list-style-type: none"> • If dirty or oxidized – Clean • If damaged – Replace the Antenna Flex Film 	

5 Audio Problems

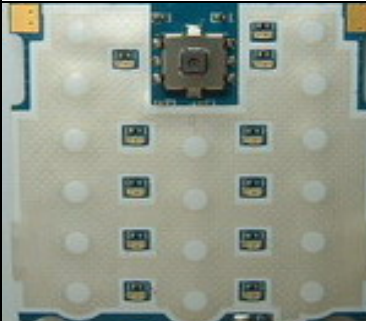


Problem Area	Items to Check	Repair Action	Reference Image
Microphone	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Visually inspect the Microphone pads	<ul style="list-style-type: none"> If dirty or oxidized – Clean 	
	Visually inspect the Microphone Assy	<ul style="list-style-type: none"> If damaged, dirty or oxidized - Replace Microphone Assy 	
Earphone No sound or poor quality sound	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Visually inspect the Front Cover Insert external	<ul style="list-style-type: none"> If clogged – Replace the Front Cover 	
	Visually inspect the Earphone pads	<ul style="list-style-type: none"> If dirty or oxidized – Clean 	

Problem Area	Items to Check	Repair Action	Reference Image
No sound or poor quality sound (Cont.)	Visually inspect the Earphone Assy	<ul style="list-style-type: none"> If damaged, dirty or oxidized - Replace Earphone Assy 	
	If the issue has not been resolved →	<ul style="list-style-type: none"> Replace the Earphone Assy if it has not already been replaced 	


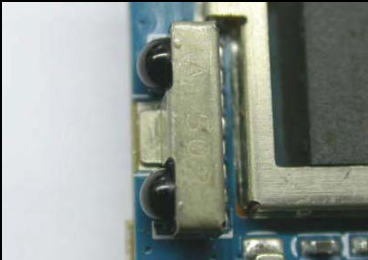
6 Alert Problems

Problem Area	Items to Check	Repair Action	Reference Image
Vibrator	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Visually inspect the Vibrator pads	<ul style="list-style-type: none"> If dirty or oxidized – Clean 	
	Visually inspect the Vibrator Assy	<ul style="list-style-type: none"> If damaged, dirty or oxidized - Replace Vibrator Assy 	
Loudspeaker	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Visually inspect the Speaker Connector	<ul style="list-style-type: none"> If dirty or oxidized – Clean If damaged – Send to an electrical repair location 	
	Visually inspect the Loudspeaker Assy	<ul style="list-style-type: none"> If damaged, dirty or oxidized - Replace Loudspeaker Assy 	

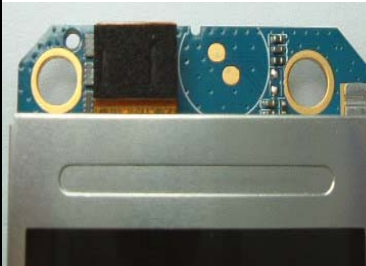
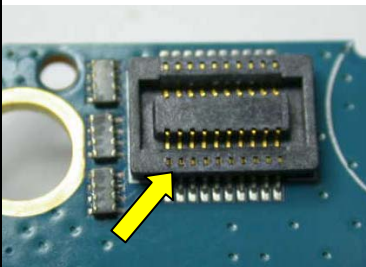

7 Key Problems

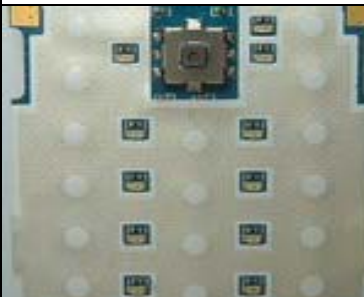
Problem Area	Items to Check	Repair Action	Reference Image
Keypad A key on the keypad is not functioning or is intermittent	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Visually inspect the Keypad Dome	<ul style="list-style-type: none"> If damaged, dirty or oxidized - Replace the keypad Dome Make sure that the surface on the PCB is cleaned before replacing.	
	Visually inspect the Keypad	<ul style="list-style-type: none"> If damaged, dirty or oxidized - Replace the keypad 	
Joystick	Before proceeding →	<ul style="list-style-type: none"> Perform a setting reset 	
	Visually inspect the Joystick	<ul style="list-style-type: none"> If damaged, dirty or oxidized - Replace the Joystick Assy 	

8 IR Problems

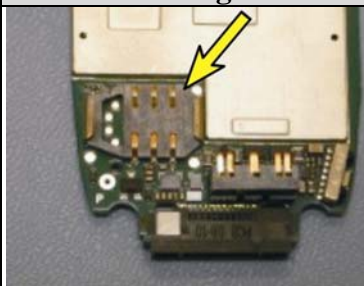
Problem Area	Items to Check	Repair Action	Reference Image
Will not connect with a functional IR device	Inspect the IrDA window for dirt, scratches, and damage	<ul style="list-style-type: none"> • If dirty – Clean • If damaged – Replace the IrDA window 	
	Inspect the IrDA transceiver	<ul style="list-style-type: none"> • If dirty or oxidized– Clean • If damaged - Send to an electrical repair location 	

9 Display Problems


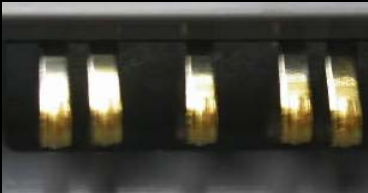

Problem Area	Items to Check	Repair Action	Reference Image
Display	Check whether the keypad illuminates	<ul style="list-style-type: none"> If activation of the keypad are not detected, refer to the “Power Problems” section 	
	Visually inspect whether the LCD flex-film is properly connected into the BTB connector	<ul style="list-style-type: none"> If improperly connected - Reestablish proper connection 	
	Visually inspect the BTB connector	<ul style="list-style-type: none"> If dirty or oxidized – Clean If damaged – Send to an electrical repair location 	
	Visually inspect the LCD connector	<ul style="list-style-type: none"> If dirty or oxidized – Clean If damaged – Replace the Display 	
	If issue has not been resolved →	<ul style="list-style-type: none"> Replace the Display 	

Problem Area	Items to Check	Repair Action	Reference Image
Illumination	Before proceeding →	<ul style="list-style-type: none"> • Perform a setting reset 	
	Visually inspect the 11 LEDS	<ul style="list-style-type: none"> • If dirty or oxidized– Clean • If damaged or no light - Send to an electrical repair location 	


10 SIM Problems

Problem Area	Items to Check	Repair Action	Reference Image
Display “Insert SIM “	Inspect SIM holder	<ul style="list-style-type: none"> • If dirty or oxidized – Clean • If damaged – Send to an electrical repair location 	
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 	

11 Charging/Capacity Problems

Problem Area	Items to Check	Repair Action	Reference Image
Battery will not charge	Visually inspect the contact pads of the Battery	<ul style="list-style-type: none"> • If dirty or oxidized – Clean • If damaged – Replace the Battery 	
	Visually the Battery connector	<ul style="list-style-type: none"> • If dirty or oxidized – Clean • If damaged – Replace the Battery connector 	
	Visually inspect the System Connector	<ul style="list-style-type: none"> • If damaged, dirty or oxidized – Send to an electrical repair location 	
Battery loses charge quickly/ standby time seems short	<p>NOTE - Some features noticeably reduce the amount of standby time if they are turned on. Some examples are the back light (when turn on all the time), Blue tooth, and infrared.</p> <p>Perform the following repair action →</p>	<ul style="list-style-type: none"> • Replace the Battery 	

12 Data Communication Problems

Problem Area	Items to Check	Repair Action	Reference Image
Problem transferring data using a direct connection	Visually inspect the System Connector	<ul style="list-style-type: none"> If damaged, dirty or oxidized – Send to an electrical repair location 	

13 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 hasn't been upgraded.

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

14 Revision History

Rev.	Date	Changes / Comments
A	2005-08-22	First Release