

# Trouble Shooting Guide, Electrical

Applicable for T303

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# 1 General

The purpose of this document is to indicate the electrical level repair actions associated with the different failure symptoms.

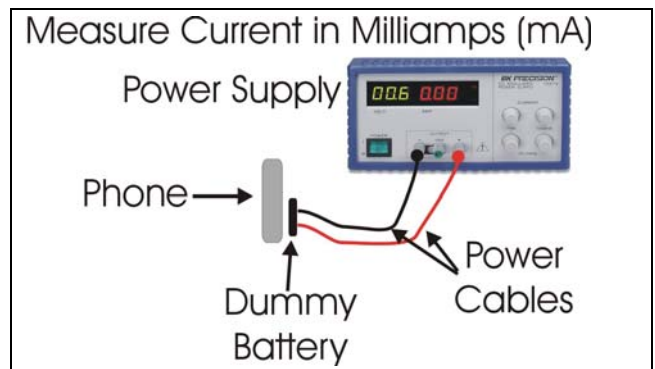
For symptoms that have multiple repair actions, the repair actions are listed in order of their probability of creating a successful repair. The first action has the highest probability, and subsequent actions have lower probabilities. The intention is for the repair technician to implement the first 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 repairable at this level.

This document should be used only after the actions from the Mechanical Trouble Shooting Guide have been exhausted for the specific symptom.

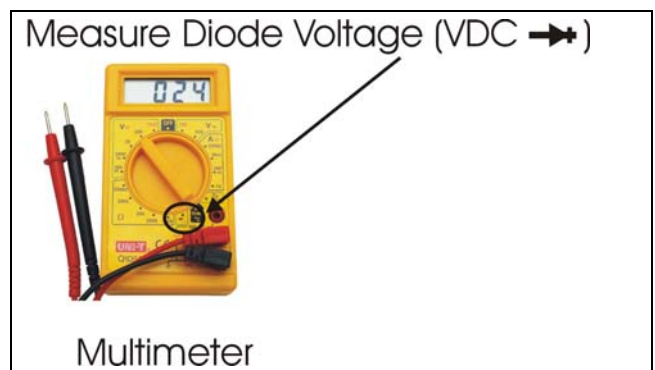
Voltage, current, and resistance information is provided for some symptoms to enable faster repairs. Perform current measurements using a dummy battery and power supply with digital current display. The phone should be fully assembled. Perform voltage and resistance measurements with a multimeter. Purchasing this equipment and performing these measurements is optional but recommended.

Perform current measurements using a dummy battery and power supply with digital current display.

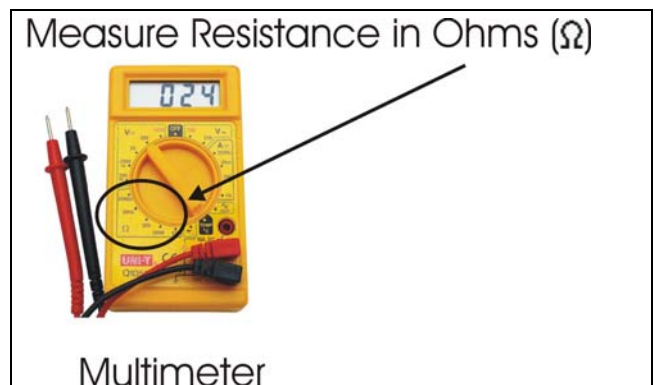
The phone should be fully assembled.



Perform voltage measurements with a multimeter.



Perform resistance measurements with a multimeter.





## 2 Repair Actions for Manual Test Failures

Failure	Failure Symptom	Action - Replacement
<b>2.1 Power Problems</b>	No Power On	<ul style="list-style-type: none"> <li>• D503 if short circuit</li> <li>• D504 if short circuit</li> </ul>
<b>2.2 Display Problems</b>	NO Display	<ul style="list-style-type: none"> <li>• J401 if damaged</li> <li>• RN1</li> <li>• RN2</li> <li>• RN3</li> </ul>
<b>2.3 Charging/Capacity Problem</b>	Can't charge	<ul style="list-style-type: none"> <li>• D505 if short circuit</li> <li>• U501</li> </ul>
	Can't charge	<ul style="list-style-type: none"> <li>• U502</li> </ul>
	Can't Pre-charge	<ul style="list-style-type: none"> <li>• D501 if short circuit</li> <li>• D502 if short circuit</li> </ul>
	Leakage current too high	<ul style="list-style-type: none"> <li>• D503 if short circuit</li> </ul>
<b>2.4 Camera Problem</b>	Can't take picture	<ul style="list-style-type: none"> <li>• J401</li> </ul>
<b>2.5 Blue-tooth Problem</b>	Can't connect with other device via BT	<ul style="list-style-type: none"> <li>• U801</li> </ul>
	Can't connect with other device via BT	<ul style="list-style-type: none"> <li>• D711 if short circuit</li> </ul>
<b>2.6 Alert problem</b>	Vibrating alert problem	<ul style="list-style-type: none"> <li>• VIB1</li> </ul>
<b>2.7 Display Illumination Problem</b>	No LCM backlight	<ul style="list-style-type: none"> <li>• U402</li> </ul>
<b>2.8 Audio Problem</b>	No Audio	<ul style="list-style-type: none"> <li>• J601</li> </ul>
	No Ring Tone	<ul style="list-style-type: none"> <li>• U601</li> </ul>
<b>2.9 Radio Problem</b>	No Radio	<ul style="list-style-type: none"> <li>• D702</li> <li>• U801</li> </ul>
<b>2.10 Network/Signal Problems</b>	No network or poor network	<ul style="list-style-type: none"> <li>• J901</li> </ul>
<b>2.11 SIM Problems</b>	Display "Insert SIM "	<ul style="list-style-type: none"> <li>• J402</li> </ul>
<b>2.12 Data communication Problems</b>	Can't link with computer	<ul style="list-style-type: none"> <li>• D707 if short circuit</li> <li>• D708 if short circuit</li> </ul>
<b>2.13 Key Problems</b>	Key doesn't work	<ul style="list-style-type: none"> <li>• J402</li> </ul>
<b>2.14 Real Time clock Problems</b>	The clock has to be set after the battery has been detached	<ul style="list-style-type: none"> <li>• X201</li> </ul>



### 3 Revision History

Rev.	Date	Changes / Comments
1	2008-07-10	1 <sup>st</sup> version
2	2009-04-23	RN1, RN2, RN3 added to Display problem
3	2010-01-14	D702 added to Radio problem