



**MOTOROLA**

Motorola GmbH, CSS Center, Mobile Devices

Doc. No: PRE - TSG\_V3xx

Version: 1.0

Date: 09.03.2007

Title: PRE - Troubleshooting-Guide **V3xx**

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**LEVEL 3**  
**PRE - DEBUG GUIDE**  
**V3xx**



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MODIFY	DATE	BY:
New	08-03-2007	Juan Antonio Ortiz

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**Requirements**

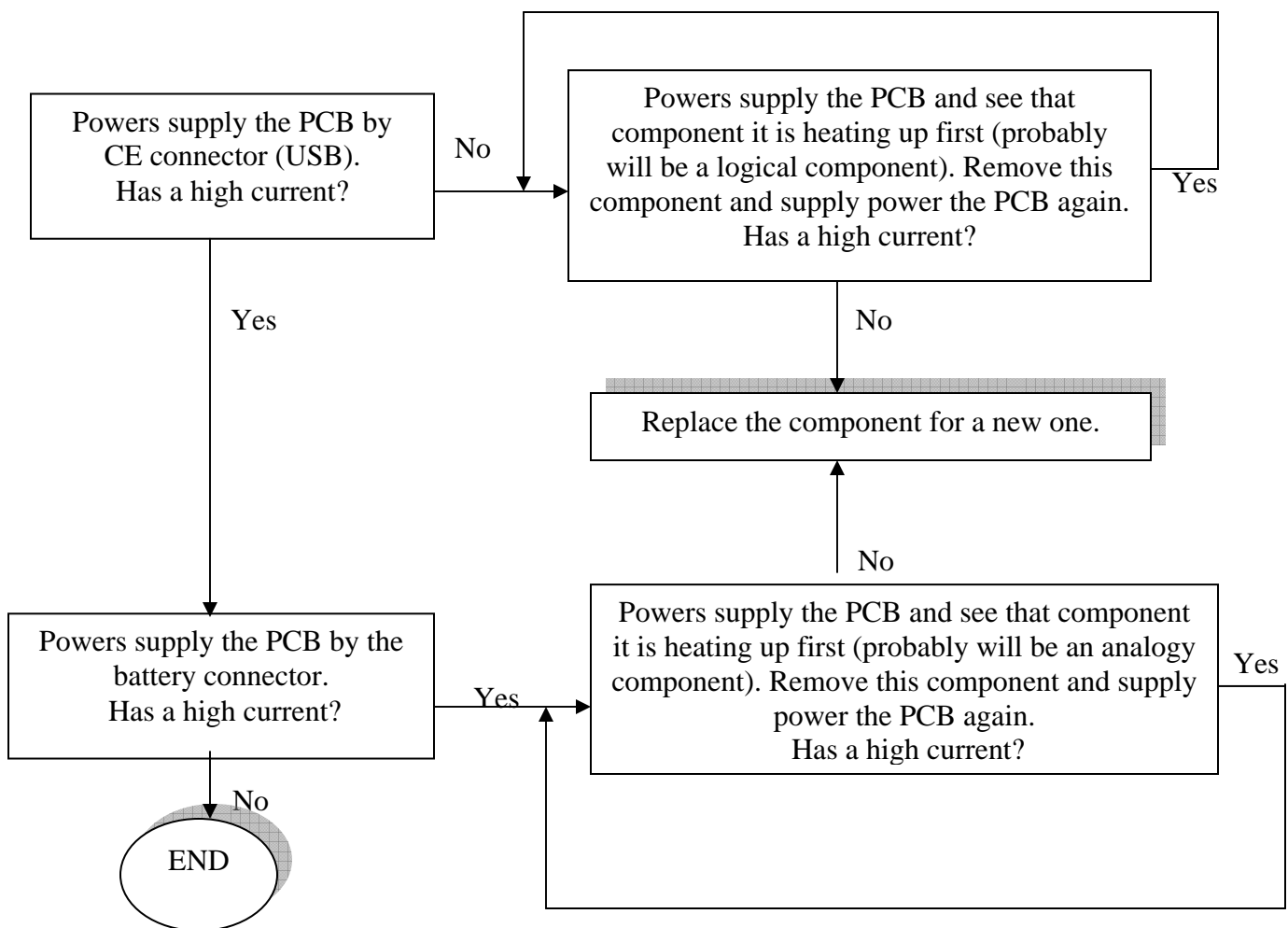
- **System Requirements**
- *Power supplies, Oscilloscope, Spectrum Analyzer, Test Set*
- *Pre-heater for lead free soldering / solder machine for BGA´s*
- *Microscope*
- *Repair Studio / Radiocomm,*
- *Field Service Bulletins*
- *Block diagrams/Schematics*
- *FLVIEW*
- **Basic information on troubleshooting Motorola Phones**
- *Make sure all contacts are clean, especially the USB-Connector*
- *Use newest approved Software*
- *RESET / MASTERCLEAR can fix some issues*
- *Do a visual inspection on customer abuse/liquid contamination*
- **Advice on working with lead free soldering**
- *Remove RTC battery/microphone before soldering*
- *Work very carefully because of underfill*
- *Use protection shields*
- *Use lead free flux*
- *Use pre-heater (HAKKO 853)*

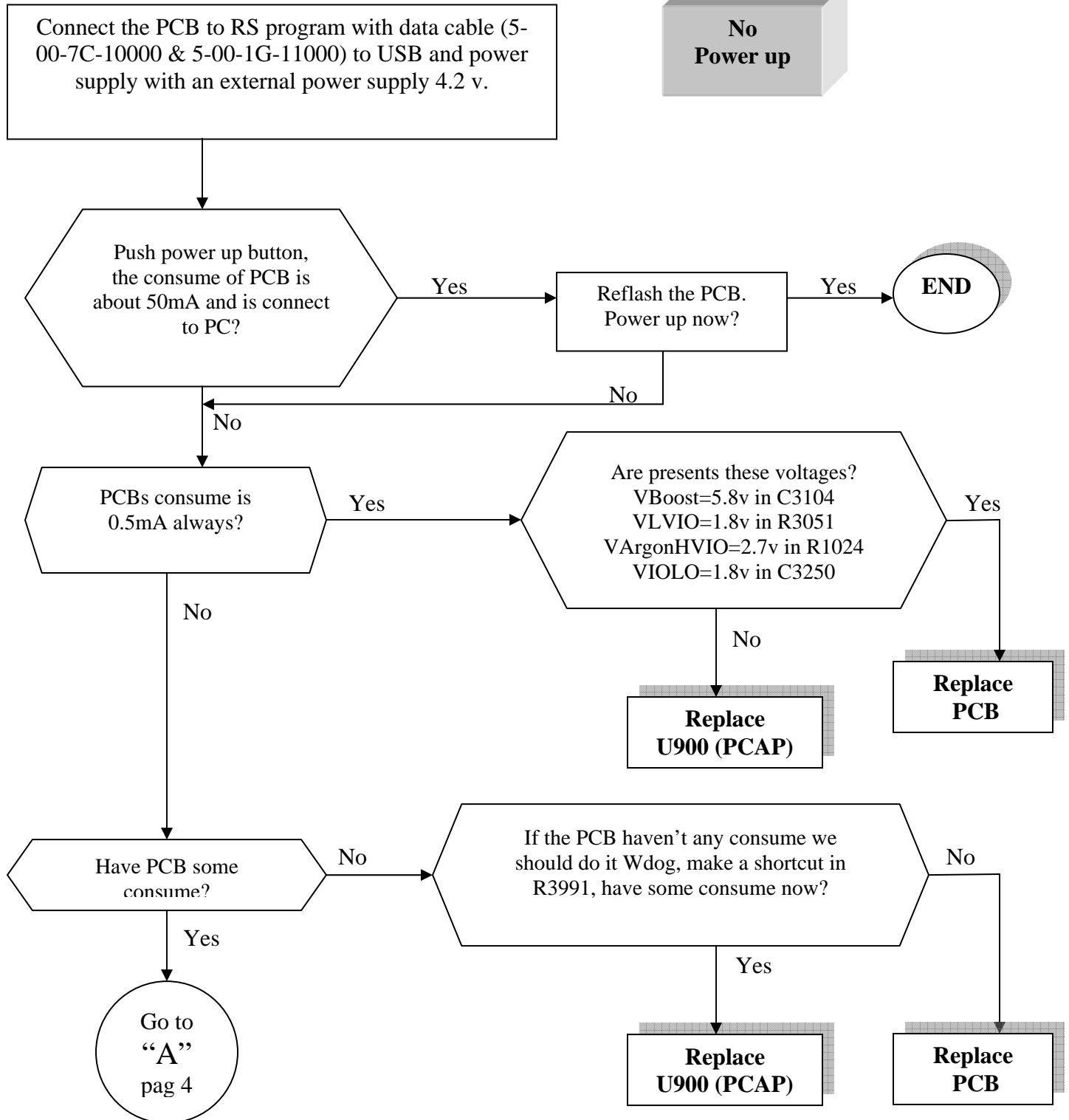
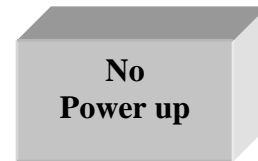


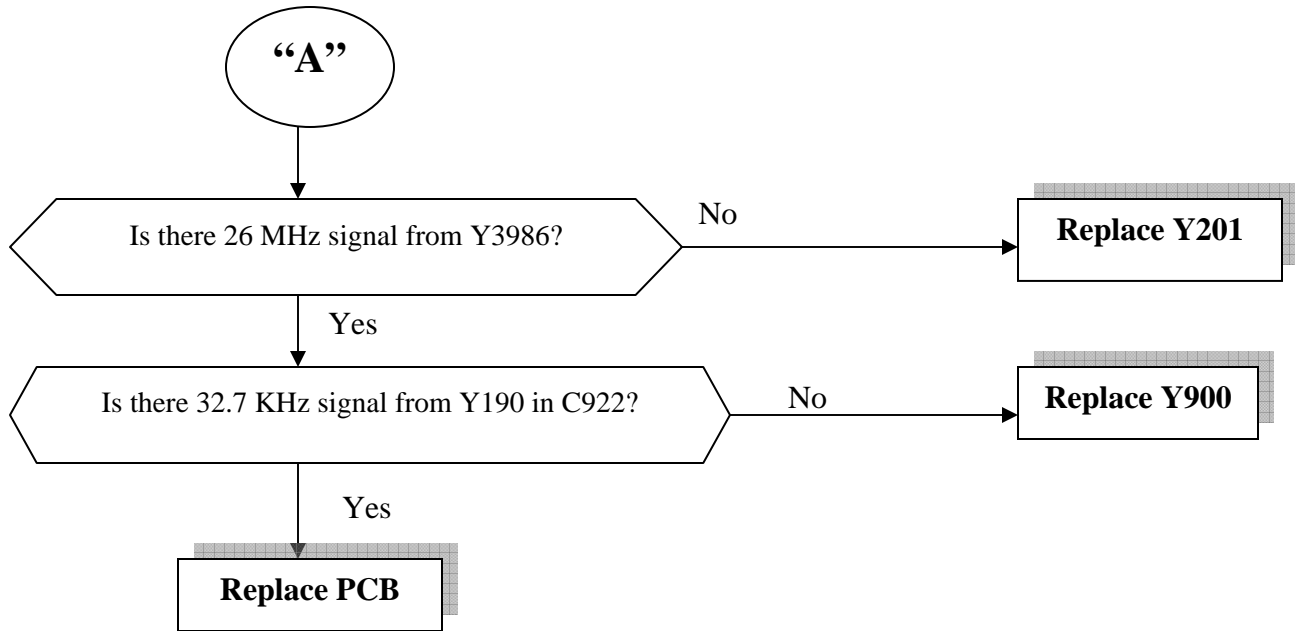
**SPECIAL PROCEDURE FOR HIGH CURRENT FAILURE**

If we supply power the PCB by the CE connector (USB) and check that it has high current, it means that this high current comes from the logical part (probably of the PCAP3). If we power supply by battery connector and has high current is very probable that the failure comes from the analogical part.

First we supply power the PCB by the cable on data (USB) and later by the battery connector to differentiate from where the failure comes. Once identified where the failure possibly comes from, we apply power to PCB to see what component is heating up first. Desolder the component and apply again power PCB and check if the high current still remains or not. If still remain we will follow the same procedure with next warm component.









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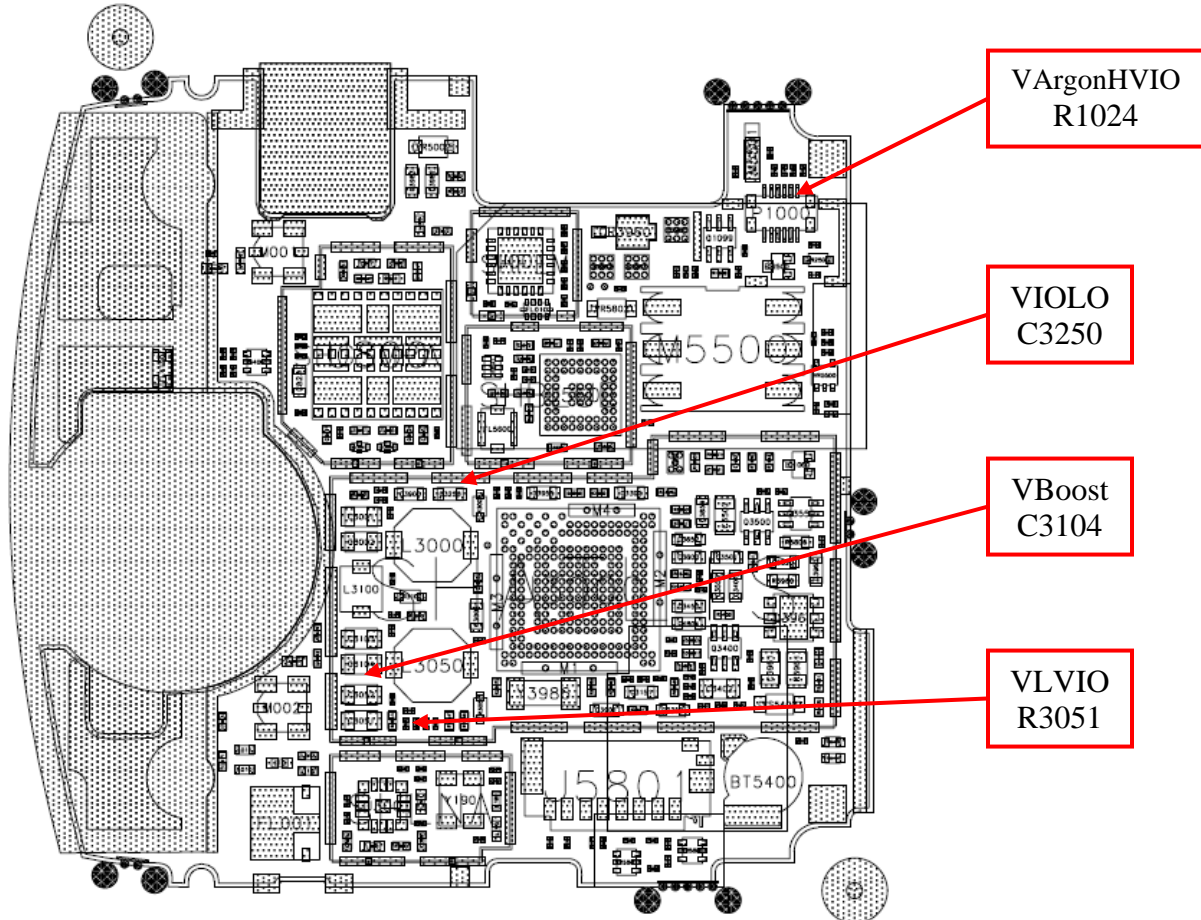
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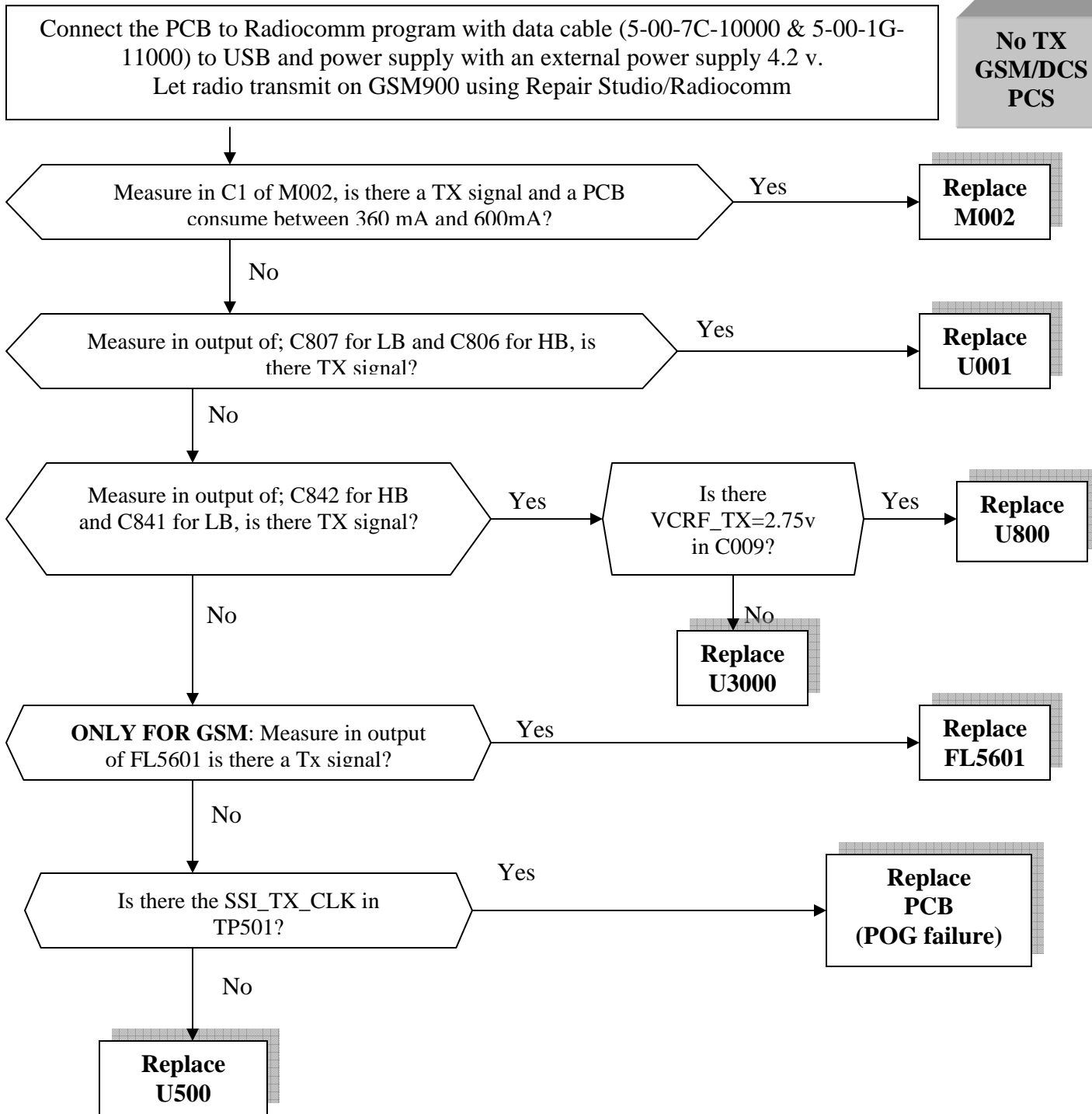
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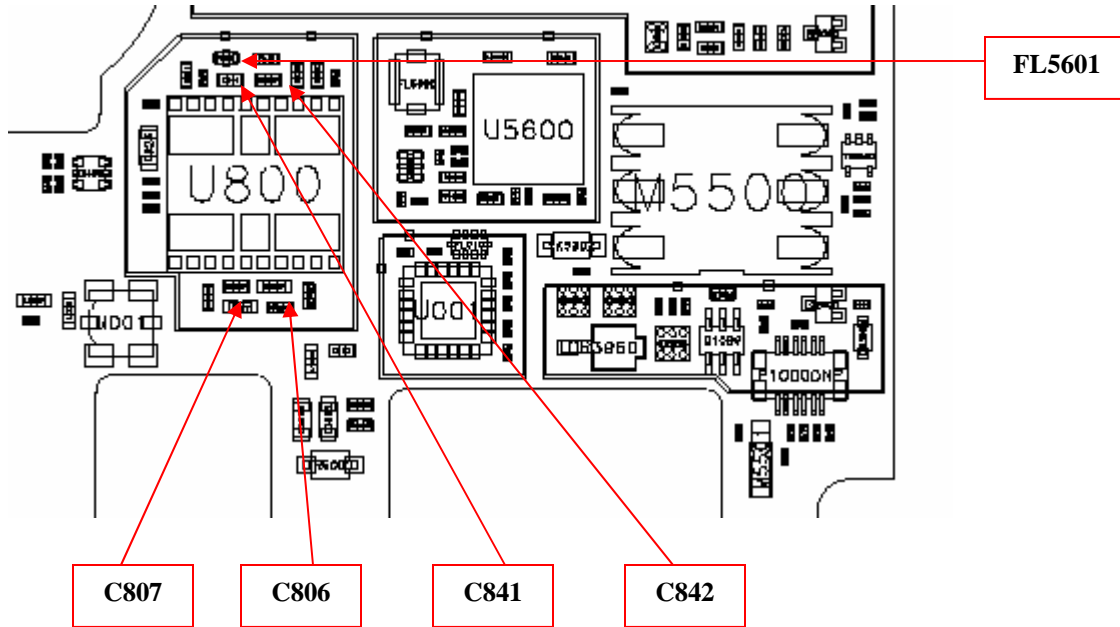
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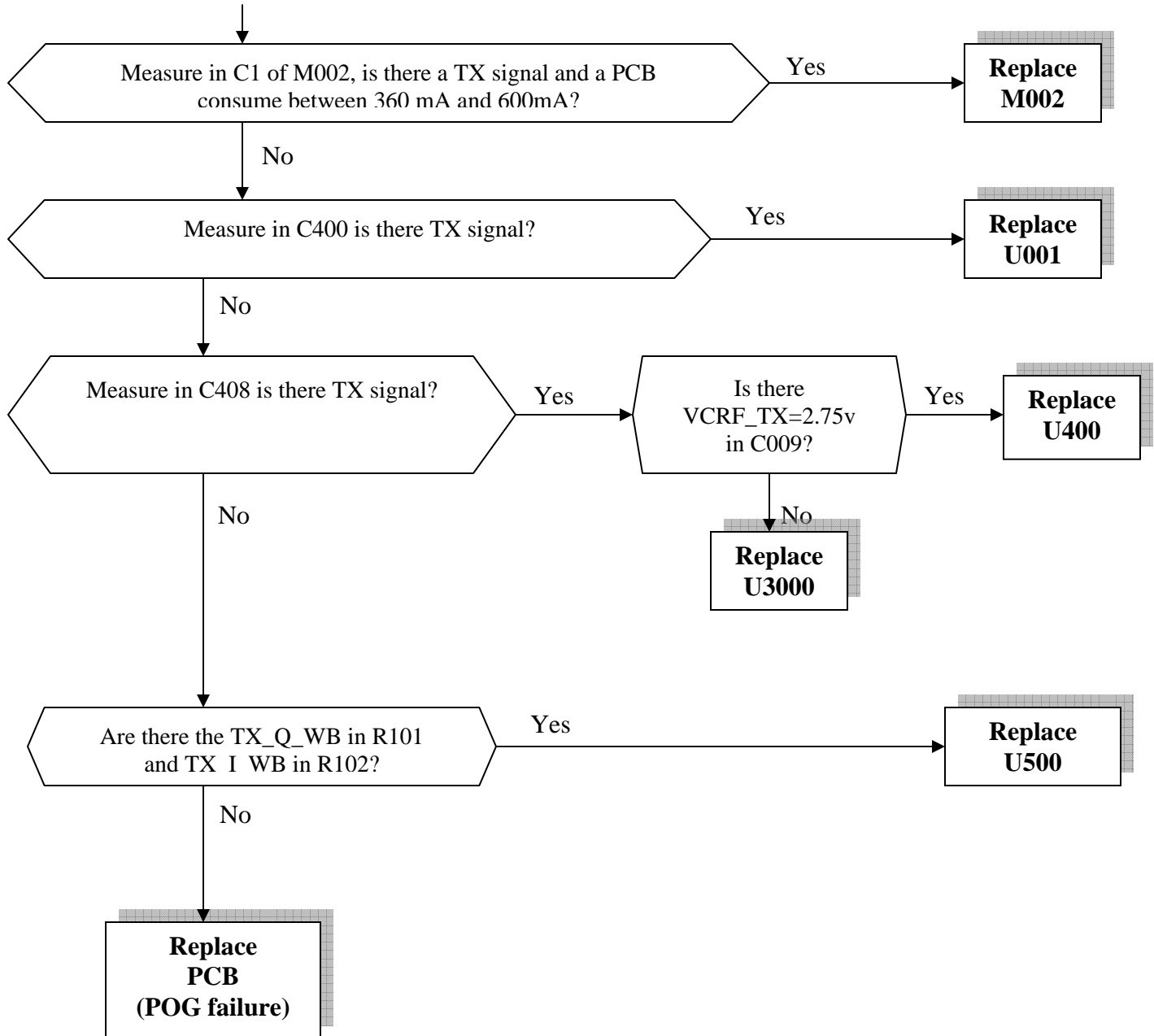
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Connect the PCB to Radiocomm program with data cable (5-00-7C-10000 & 5-00-1G-11000) to USB and power supply with an external power supply 4.2 v.  
Let radio transmit on 3G using Repair Studio/Radiocomm

**No TX  
3G**





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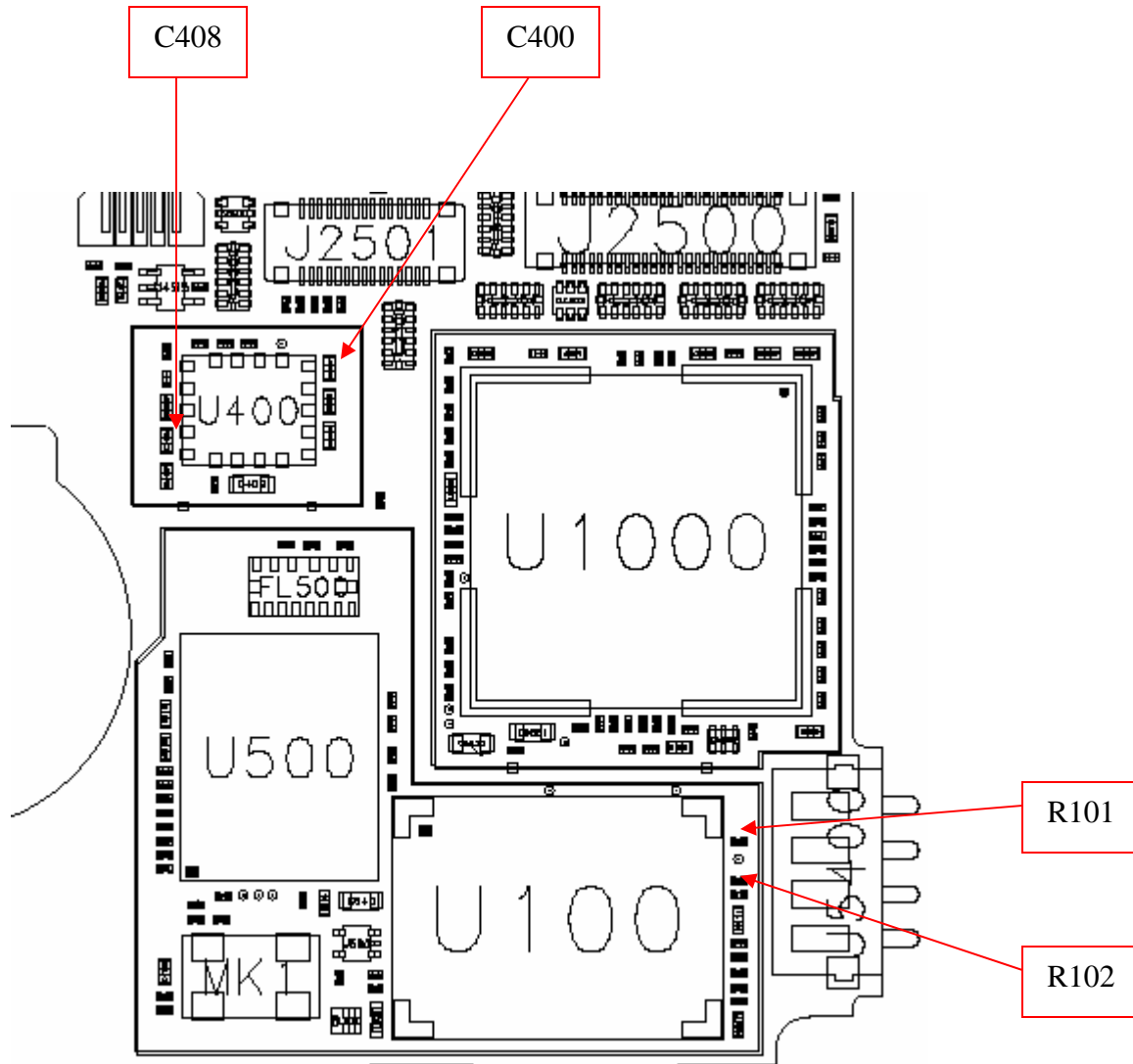
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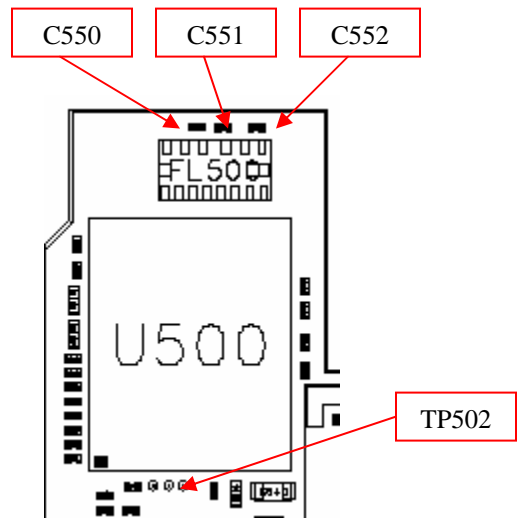
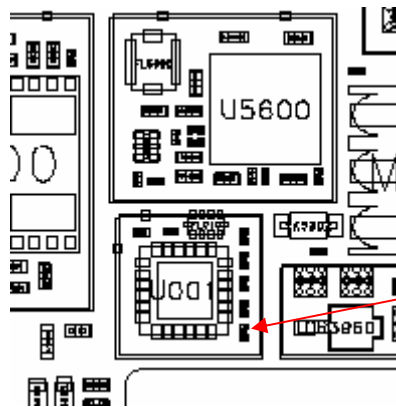
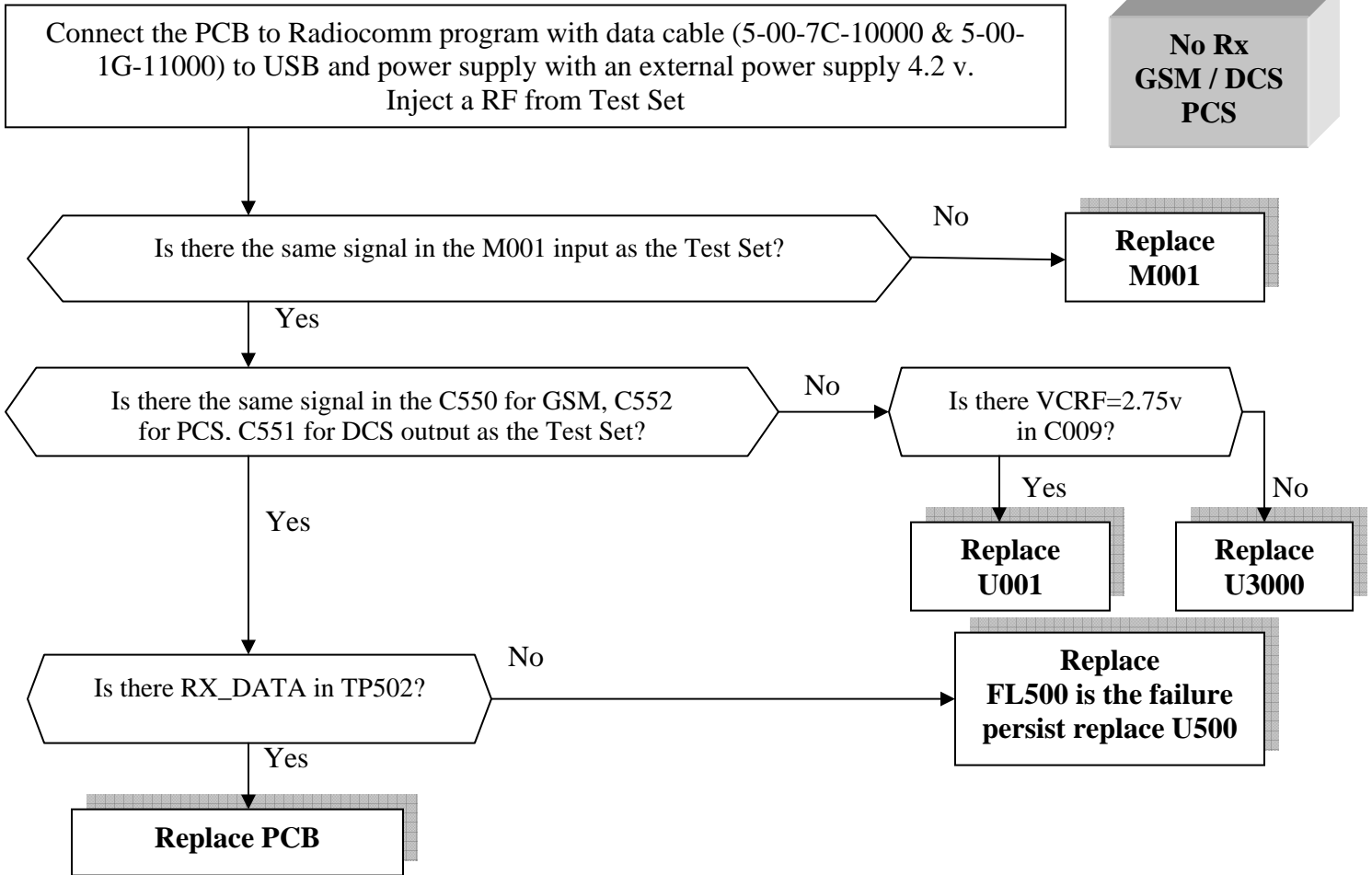
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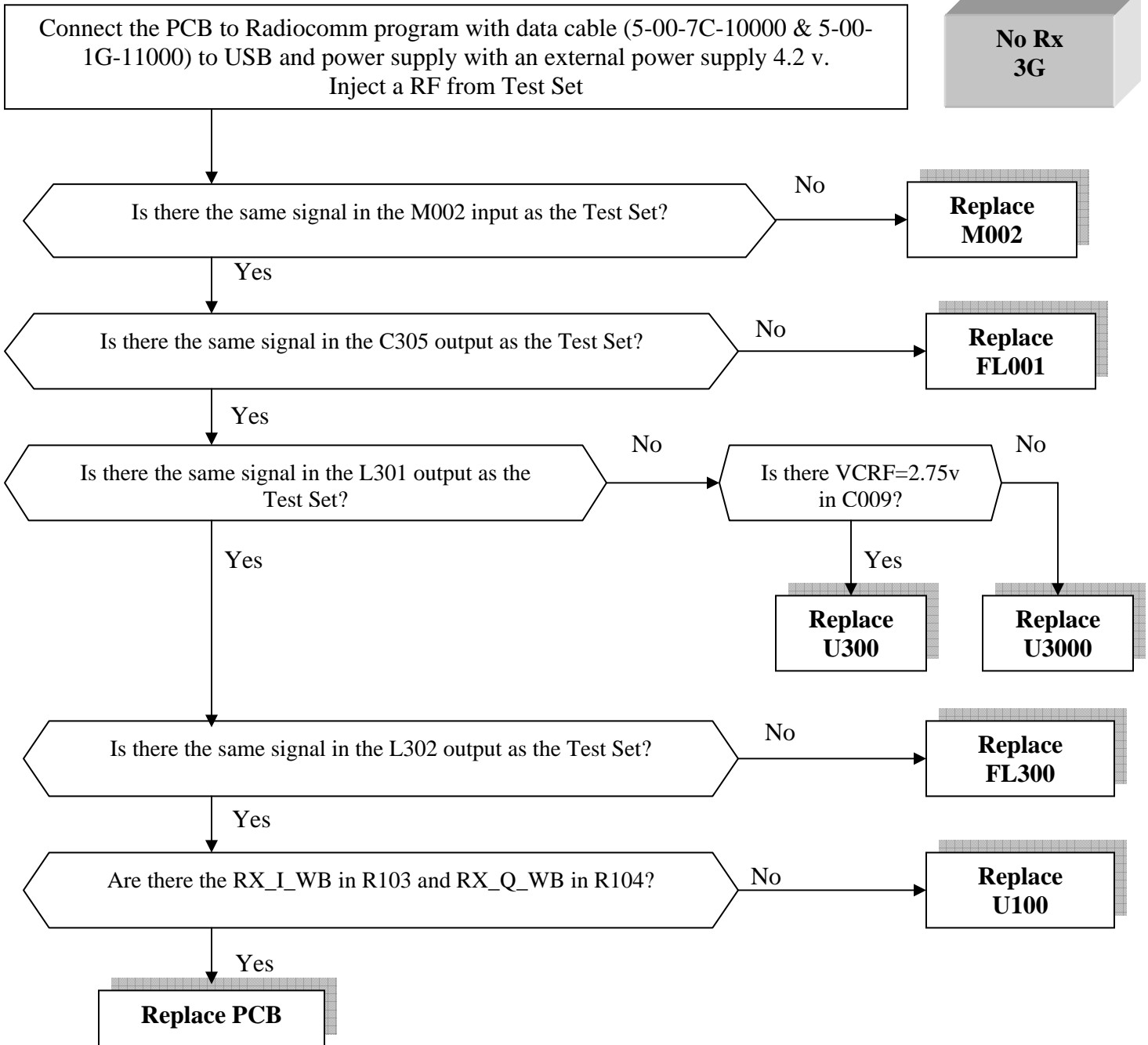
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