

S E R V I C E N O T E

SUPERSEDES: None

**4142B Modular DC Source/Monitor**

**Serial Numbers:** 2946J00000 / 3121J02683

**HCU's current compliance may occur unexpectedly.**

**To Be Performed By:** Agilent-Qualified Personnel

**Parts Required:** See text.

**Situation:**

The problem may occur on the 4142B with the High Current Unit (HCU). The firmware revision is 3.0, 3.1, 4.0, or 4.1.

The problem shows the following phenomena:

- Current compliance occurs on the HCU that is NOT used for the measurement. (The 4142B returns the measurement data status "Another channel reaches compliance" or "Txx".)
- The symptom occurs after the Self-Calibration only and does NOT occur after the Self-Test.
- The symptom may disappear by replacing the HCU.

The IMA (Interactive Measurement Analysis) software performs the Self-Calibration at the initialization process. Therefore, the symptom may typically appear when the 4142B and the HCU are used with the IMA software. Also, the symptom may appear when the Auto Calibration mode of the 4142B is ON.

*Continued*

DATE: December 1994

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:					
<b>MODIFICATION RECOMMENDED</b>					
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	Labor 1.0 Hour		
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input checked="" type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT	USED PARTS:	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE		AGILENT RESPONSIBLE UNTIL: January 1997		
AUTHOR: MO	ENTITY: 3300		ADDITIONAL INFORMATION:		

**Solution/Action:**

If the above phenomena are verified, update the 4142B's firmware revision to 4.2 by replacing ROMs. (Do NOT replace the HCU at the beginning).

The following table indicates the required ROM part number(s) for each firmware revision:

Revision	ROM Part Number	Description
3.0/3.1	04142-86835	ROM Set, Rev 4.2
4.0	04142-85038	ROM, U83
	04142-85039	ROM, U85
	04142-85044	ROM, U48
	04142-85045	ROM, U64
4.1	04142-85044	ROM, U48
	04142-85045	ROM, U64

To replace ROMs, use the following procedure:

1. Turn the 4142B off and wait at least ten seconds.
2. Remove the CPU module from the 4142B mainframe.
3. Remove the side panel of the CPU module.
4. Remove the ROMs per the above table. For example, if the current revision is 4.1, remove U48 and U64. If the current revision is 3.0 or 3.1, remove all (16) ROMs. See Figure 1 for the ROM locations.
5. Place the new ROMs.
6. Reinstall the side panel of the CPU module, and reinstall the CPU module in the 4142B.
7. Turn the 4142B on. Confirm that no error appears in the ERROR/FAILURE display of the 4142B front panel.

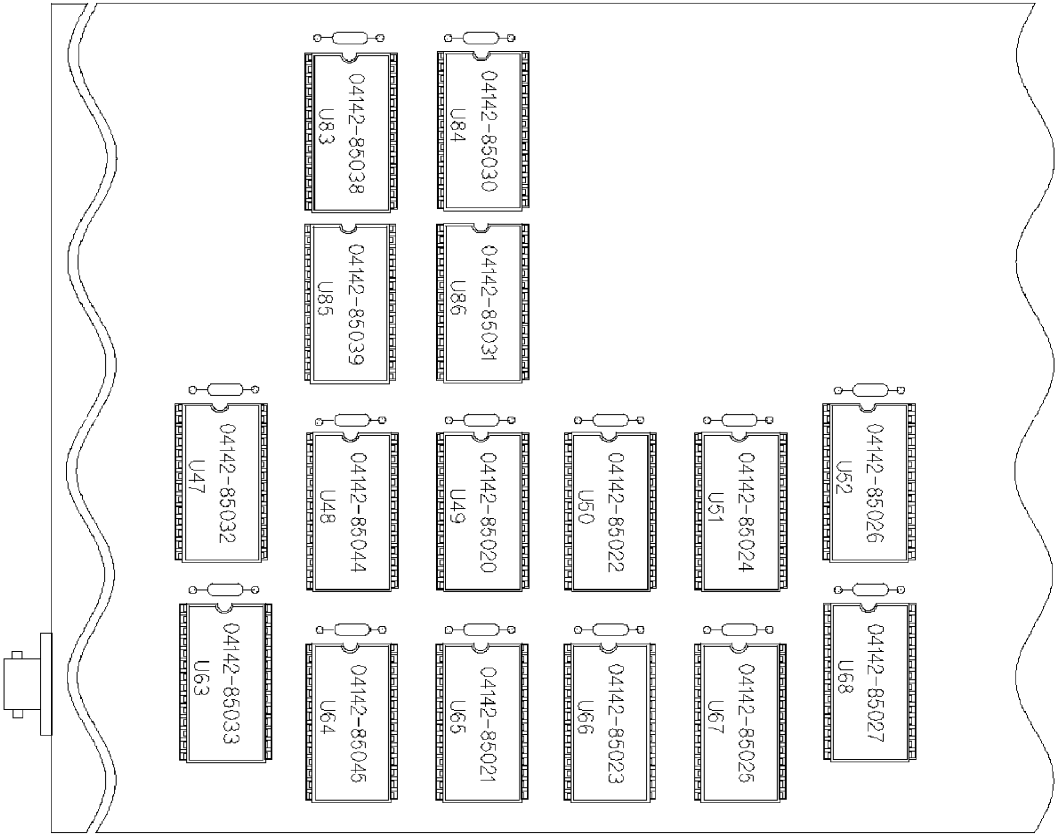


Figure 1. ROM Locations