

MODIFICATION RECOMMENDED

3458A-20

S E R V I C E N O T E

Supersedes:
NONE

3458A Multimeter

Serial Numbers: MY45043514 / MY45044113 and SG45040233 / SG45040350

Bad SRAM causing Cal Ram batteries to fail prematurely

Parts Required:

P/N	Description	Qty.
03458-66547	A5 Outguard controller	1
OR		
03458-66548	A5 Outguard controller (opt. 001)	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS	LABOR: 1.0 Hours
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER <input type="checkbox"/> CHANNEL PARTNER	SERVICE INVENTORY: <input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT	USED PARTS: <input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: December 2010	
AUTHOR:	LH	PRODUCT LINE: SP	
ADDITIONAL INFORMATION:			

© AGILENT TECHNOLOGIES, INC. 2008
PRINTED IN U.S.A.

December 4, 2008

Rev. 15



Situation:

1818-5231 is an SRAM which stores nonvolatile memory located on the A5 assembly. This IC requires an external battery to retain data during power off mode. It was found that some of these ICs are drawing a large amount of current from the battery, causing the batteries to drain within a few days.

Normally during power off mode these ICs will require about 1uA – 4uA of current. We have seen bad ICs drawing up to 200uA of current.

Symptoms:

If a unit has bad SRAM it will display numerous errors during power up including: RAM CHECKSUM, ACAL ALL REQUIRED, SCAL ALL REQUIRED, CAL ALL REQUIRED, and SECURE REQUIRED.

After power up you can check for additional error messages by pressing the blue softkey followed by the Error softkey on the front panel, or you can check remotely by sending the ERRSTR? command. If a unit has bad SRAM, you should see ERROR 110 Calibration Required - -SCAL, and ERROR 114 System Error - -non-volatile ram checksum.

***These are the same error symptoms that would normally be caused by a failed Cal Ram battery due to aging, in which you would just change out the batteries. For units shipped between June 2008 and September 2008 the errors are caused by bad SRAM and the entire A5 assembly must be replaced.

Solution/Action:

Contact your local Agilent Service Center to arrange to have your instrument repaired. The A5 board will be replaced and the unit will be recalibrated.