

MODIFICATION RECOMMENDED –
CORRECTS MANUFACTURING OR DESIGN DEFECTS

5071A-09C

S E R V I C E N O T E

Supersedes:
5071A-09B

5071A Primary Frequency Standard

Serial Numbers: 3132A00101 through US4425

Firmware Upgrade Notification

To Be Performed By: Agilent-Qualified Personnel or Customer

Parts Required:

P/N: 05071-67006 Description: Kit Qty. 1

Tools Required: T-15 TORX Screwdriver
T-10 TORX Screwdriver
Small blade, (1/8”), Screwdriver
Anti-static Workstation

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
MODIFICATION RECOMMENDED		
ACTION CATEGORY:	☐ IMMEDIATELY ☐ ON SPECIFIED FAILURE ☒ AGREEABLE TIME	STANDARDS: LABOR: 0.5 Hours
LOCATION CATEGORY:	☒ XX CUSTOMER INSTALLABLE ☐ ON-SITE ☐ SERVICE CENTER	SERVICE INVENTORY: ☒ RETURN ☐ SCRAP ☐ SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS: ☐ RETURN ☒ X SCRAP ☐ SEE TEXT
AGILENT RESPONSIBLE UNTIL: 09/30/2006		
AUTHOR: D. Carlson PRODUCT LINE: 04		
ADDITIONAL INFORMATION:		

© AGILENT TECHNOLOGIES, INC. 2004
PRINTED IN U.S.A.



September 13, 2004

Situation:

A new firmware upgrade (revision 4433) is available to reduce susceptibility to some Cesium Beam Tube fluctuations. This most recent revision will also solve the occasional "servo system is in manual mode" error seen on power-up, which can occur with revisions 4230 and 4345. There is also a new E-Mult adjustment algorithm that has a better reaction to some internal CBT parameter changes to maintain lock and un-interrupted operation.

New Status Messages

There will be two new advisory messages and one new fatal error message that should be noted:

Advisory

E-mult adjusted - this appears to notify that due to internal CBT parameters the E-mult voltage was adjusted by a larger amount than usually required during steady-state operation. The appearance of this message on the display will be accompanied by a visible "wink" of the green Continuous Operation LED which is normal. No action required.

Waiting for Stabilization - This message replaces the old "Waiting for Ion Pump Start" during instrument warm-up. This message more correctly describes the operation in progress. No action required.

Fatal Error

E-mult adjust failed - Indicates that although larger e-mult movements were attempted the internal CBT parameters could not be compensated sufficiently to allow continued operation. Repair is likely necessary, however a re-start of the 5071A should first be attempted as a possible remedy.

Solution/Action:

1. Verify the firmware revision for the Agilent/HP 5071A using one of the following methods:

a) From the Front Panel, enter the "UTIL" menu. Select "VERS". The Firmware Revision should show.

b) If you are communicating with the Agilent/HP 5071A via the serial port (terminal) you can enter the following command from the terminal keyboard:

*IDN? <enter>

The Agilent/HP 5071A will respond with information containing the current firmware revision.

2. If you see "4433" or higher, your Agilent/HP 5071A has the correct firmware revision. There is no need to obtain a kit.

3. If you have verified that the firmware revision is below "4433" obtain a Firmware Upgrade Kit Agilent Part Number, 05071-67006 and follow included instructions.

Date: 09/10/04