

S E R V I C E N O T E

SUPERSEDES: 5071A-06

5071A Primary Frequency Standard**A12 DC-TO-DC Converter Input Failures****Serial Numbers:** 3132A00101 / 3249A00620 (excluding option #048 instruments)**To Be Performed By:** Agilent Service technicians**See Also:** 5071A-05A, 5071A-07**Parts Required:**

Refer to text before ordering any of the fuses below.

Quantity	Description	P/N
1	A12 Dc-to-dc Converter Assembly	05071-69212
1	A11F1 5 Amp axial lead fuse	2110-0699 -or-
1	A11F1 5 amp surface mount Fuse	2110-0863
1	ac Mains fuse, ac voltage dependent *	
1	External dc Fuse	2110-0838

* Refer to 5071A Operating Manual for correct part number.

Continued

DATE: May 1999

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS: LABOR 2.0 Hours	
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY: <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input 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: May 2001
AUTHOR: DC	ENTITY: 0200	ADDITIONAL INFORMATION:	

Tools Required:

T-10 TORX~ Driver
t-15 TORX~ Driver
Soldering tools
Anti-Static workstation

Situation

The A12 Dc-to-dc Converter contains three separate components that convert the unregulated dc input to +5, +12, and -12 vdc for power distribution. Some A12 assemblies produced in the above serial number range may have one or more of these components that are not set to high enough design margins to be completely reliable.

Symptoms

The usual symptom is that the 5071A first blows the ac line fuse, the External dc fuse (if connected) and finally the internal battery fuse. This occurs because the 5071A will automatically switch to other available power from ac to external dc to internal battery as each preceding source disappears.

Procedure

The A12 is not field-repairable, but it can be replaced with an Exchange assembly (P/N 05071-69212). Refer to the Assembly-Level Service Manual (P/N 05071-90003) for assistance in replacing the A12 assembly.

CAUTION

Be sure that the internal batteries are disconnected before changing the A12 assembly.

1. Using the manual as a guide, remove and replace the A12 assembly.
2. Replace any affected fuses. The internal battery fuse is located on the A11 assembly. If A11 is P/N 05071-60029 use fuse P/N 2110-0863. If A11 is P/N 05071-60011, use fuse P/N 2110-0699.
3. Check the "BATTERY DISCONNECT" SWITCH OPENING ON THE REAR PANEL. There should be a nylon barrel inserted to act as a guide for inserting a tool for pressing this switch. If this guide is not installed request kit P/N 05071-67004 and follow the instructions. Service Note 5071A-07 describes this kit and procedure.
4. Be sure to leave the 5071A connected to ac mains for at least 16 hours and check the internal standby battery capacity. If it is not able to provide at least 45 minutes of power to the unit, refer to Service note 5071A-05A for further assistance.