

N6705A-01A

S E R V I C E N O T E

Supersedes:
N6705A-01

N6705A DC Power Analyzer

Serial Numbers: MY47000111 / MY47000312

Intermittent power on resets and power on lock ups.

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

P/N	Description	Qty.
1440-0211	CLIP-CABLE .5-WD NYL-6/6	2

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: 1.0 Hours
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 type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AUTHOR: WIU PRODUCT LINE: SP		NO CHARGE AVAILABLE UNTIL: October 16, 2009	
ADDITIONAL INFORMATION:			

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October 16, 2007

Situation:

The N6705A unit is experiencing intermittent power on resets and power on lock ups. Symptoms include a white display and an unresponsive front panel with all the LEDs on. The symptoms described above will occur when there is poor or high contact resistance between the bias cable (P/N 5185-8813) and the connector J55 on the P1000 board (P/N 5022-1209) and the connector P1 on the bias board (P/N 5022-1208). The contact resistance of the bias cable and the connectors are affected due to vibration.

Solution/Action:

To eliminate the problem caused by vibration the bias cable will be secured to the chassis as shown in the following figures.

Testing Note

After the updates described below have been completed turn on the unit and allow the instrument to complete self-test. This update will not affect the calibrating or performance specifications.

Electrostatic Discharge (ESD) Precautions

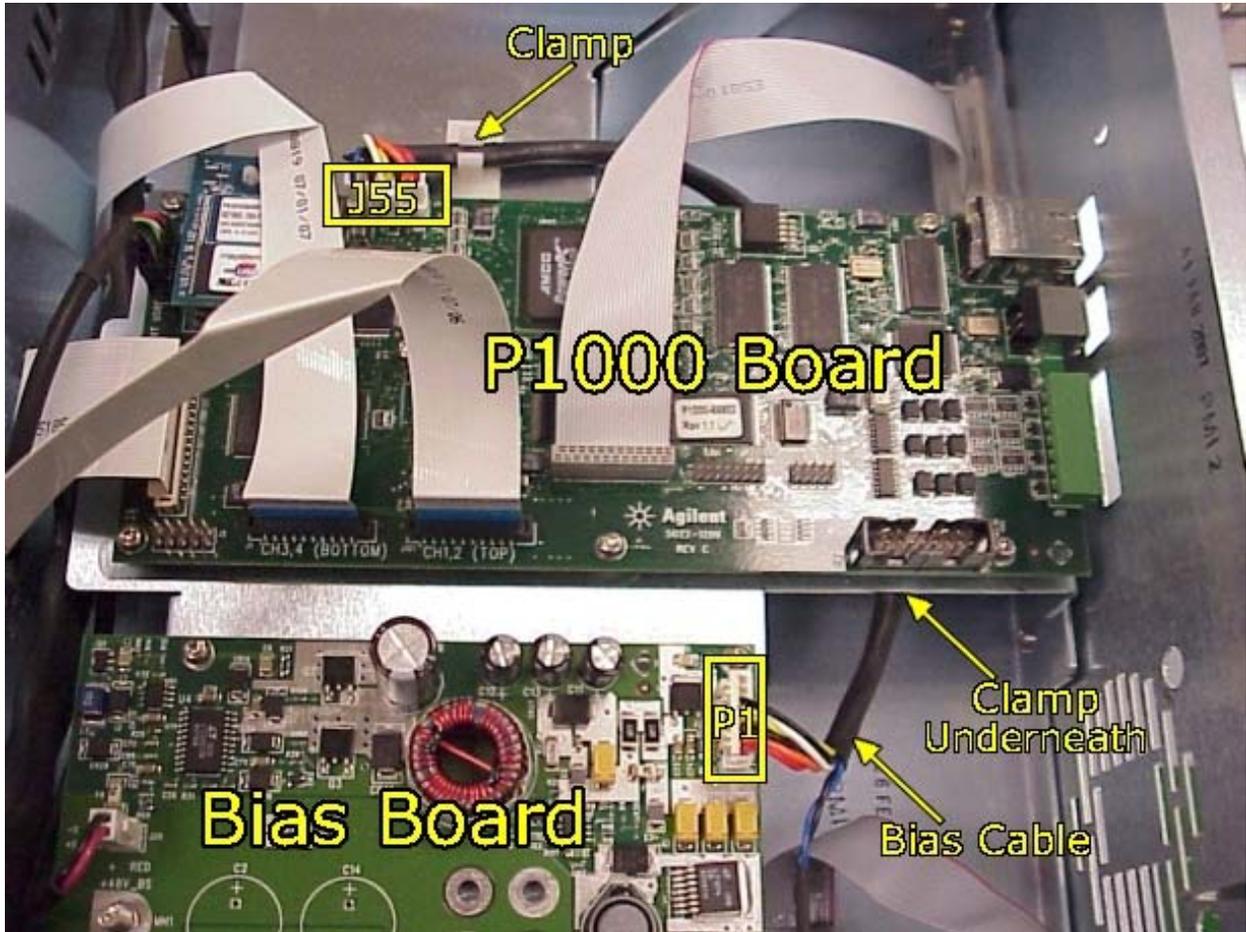
Electrical components can be damaged by electrostatic discharge (ESD) during handling. Component damage can occur at electrostatic discharge voltages as low as 50 volts. The following guidelines will help prevent ESD damage when servicing the instrument or any electronic device.

- Disassemble instruments *only* in a static-free work area.
- Use a conductive work area to reduce static charges.
- Use a conductive wrist strap to reduce static accumulation.
- Minimize handling.
- Keep replacement parts in original static-free packaging.
- Remove all plastic, foam, vinyl, paper, and other static-generating materials from the immediate work area.

Disassembly

Follow the instructions on page 51 of the N6705A Service Manual to disassemble the top chassis.

Figure 1. Demonstration of the correct placement of the clamps



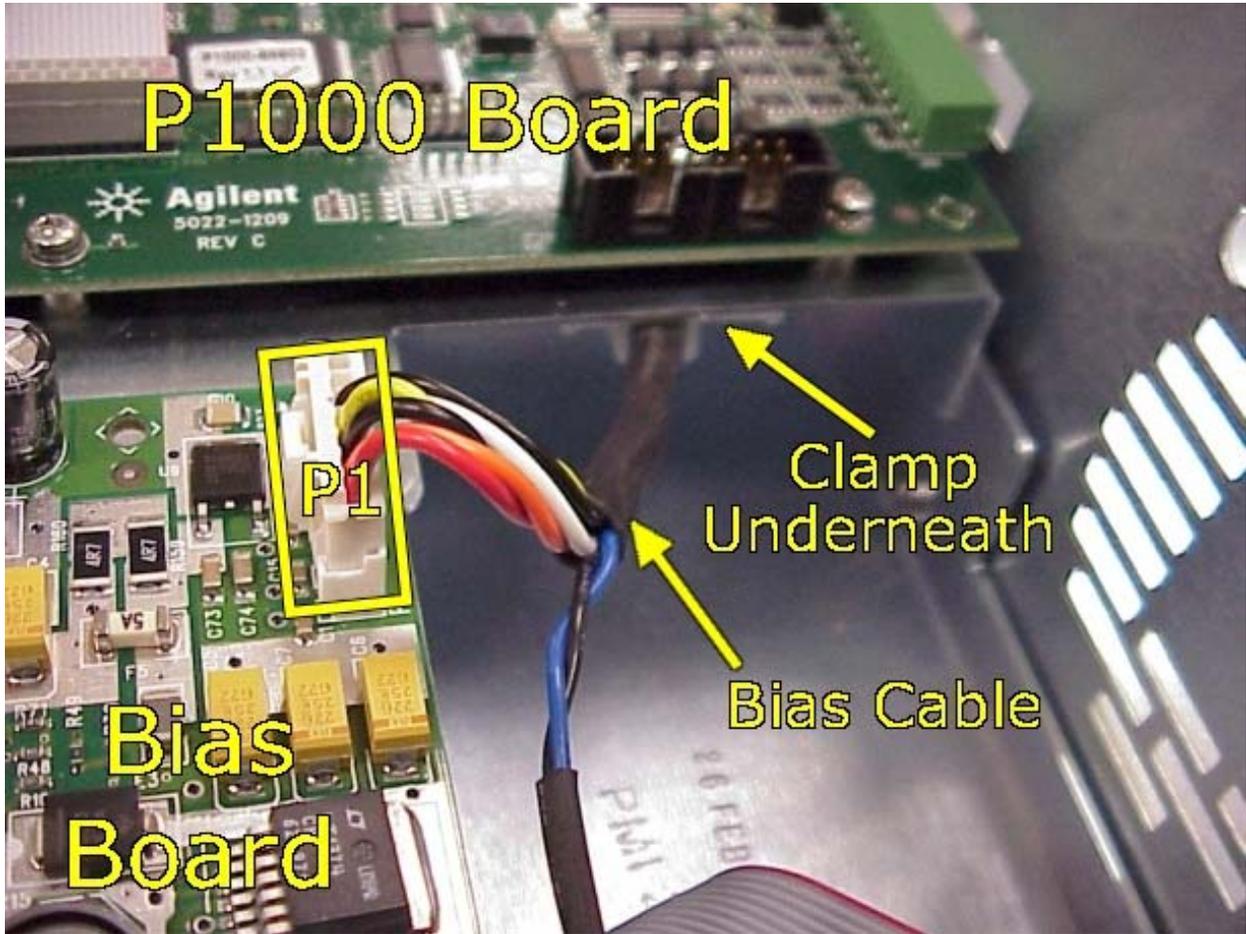
The two self-adhesive clamps are located:

1. Underneath the P1000 board on the bulk shroud. **Refer to Figure 2 for a detailed view.**
2. Next to connector J55 on the P1000 board. **Refer to Figure 3 for a detailed view.**

Tips:

- Clean the surface of the sheet metal where you plan to place the self-adhesive clamp to help ensure that the clamp is securely attached.
- When placing the self-adhesive clamp apply pressure for at least 3 seconds so that it is attached securely

Figure 2. Location to place the self adhesive clamp underneath the P1000 board on the bulk shroud



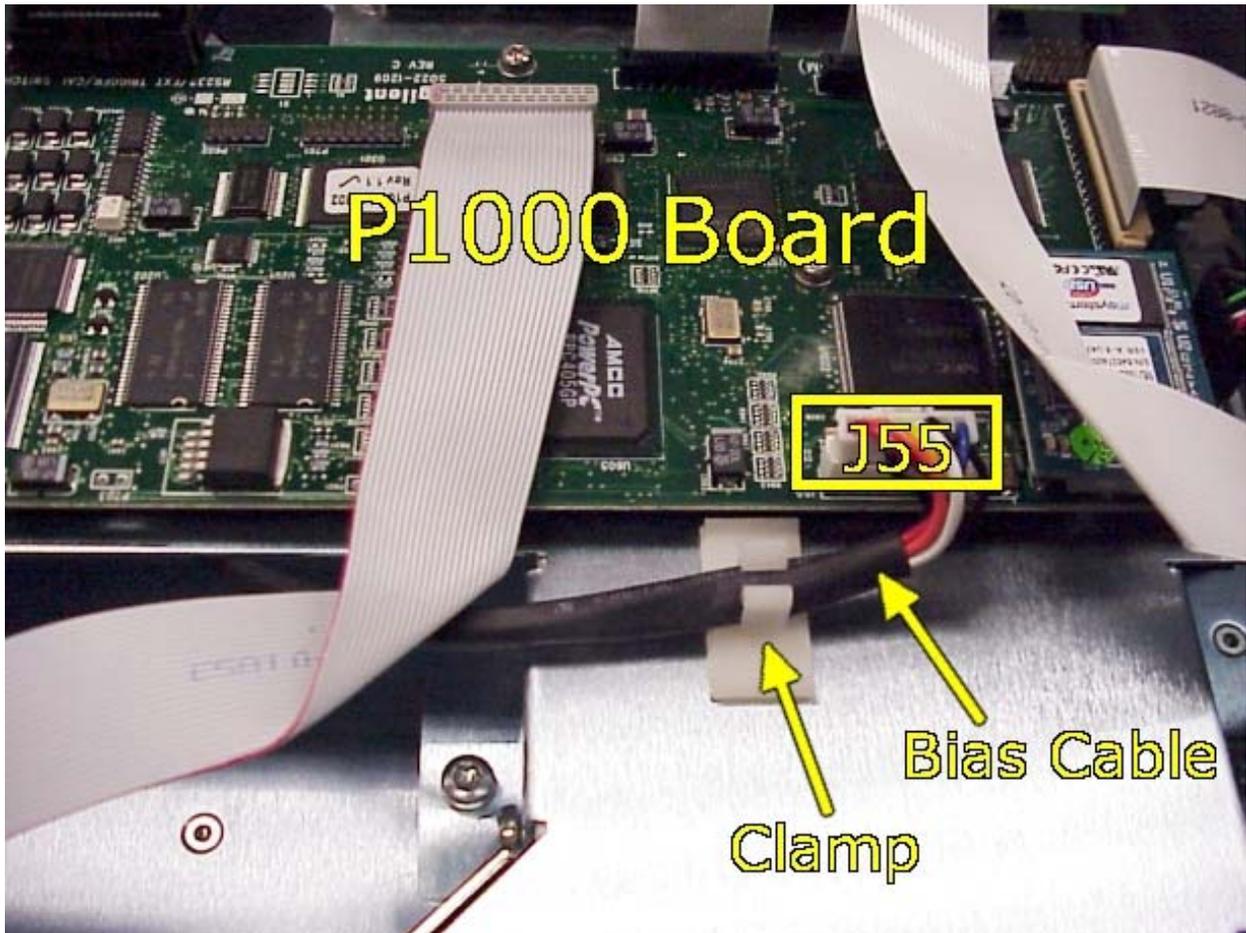
Clamp the cable first, peel off the backing and then stick the clamp at the edge closest to the bias board.

 Be careful not to damage the P1000 board when applying pressure to the clamp.

Completely remove and re-insert the cable from connector P1 three times. This will ensure that there is good contact resistance between the cable and the connector.

 Be careful not to damage any of the pins on connector P1 or to pull out any wires on the cable.

Figure 3. Location to place the self-adhesive clamp next to connector J55 on the P1000 board



Place this clamp next to connector J55 on the P1000 board.

Before inserting the cable into the clamp, completely remove and reinsert the cable from connector J55 three times. This will ensure that there is good contact resistance between the cable and the connector.



Be careful not to damage any of the pins on connector J55 or to pull out any wires on the cable.

Reassembly

Make sure that all other cables are fully inserted before reassembly. Follow the instructions on page 51 of the N6705A Service Manual to reassemble the top chassis.