

# N5745A-01

# S E R V I C E N O T E

Supersedes:  
[enter old sn number or type NONE]

N5745A DC POWER SUPPLY 30V, 25A, 750W GPIB, LAN, USB, LXI

Serial Numbers: "ALL"

**For all N57XXA models when testing Load Transient Recovery time the slew rate of the load should be set to (7E4A/s, 0.1A/uS.)**

**Parts Required:**

P/N	Description	Qty.
NONE		

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:	
<b>INFORMATION ONLY</b>	
AUTHOR: CP	PRODUCT LINE: SP
ADDITIONAL INFORMATION:	

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**Situation:**

During the design of the N57XXA it was determined that the slew rate of the electronic load must be specified when doing Transient Response Testing.

Typically the **Load Transient Recovery Time** is specified: following any step change in load **current up to 50% of the rated current.** (See Below for additional details)

Due to the **Load Transient Recovery Time:** for N57XXA are specified FROM 10 to 90% of its rated Output. (See Below for additional details)

The Slew rate requirement should change. This change should have been documented in the when the manual was originally written. The Slew rate requirement was an over site at introduction of the product.

**Typical Load Transient Recovery Time:**

< 100  $\mu$ s for the output voltage to recover to its previous level (within 0.1% of the rated voltage or 20 mV, whichever is greater) following any step change in load current up to 50% of the rated current.

**Load Transient Recovery Time: N57XXA-**

(time for output voltage to recover within 0.5% of its rated output for a load change from 10 to 90% of its rated Output current)

Voltage set point from 10% to 100% of rated output

**Solution/Action:**

Due to the N57XXA circuit design it is required to specify the load Slew Rate setting to 0.1A/uS. If the slew rate is not specified the N57XXA family may not meet the Transient Response specification.

All documentation related to this product will be updated to reflect this requirement.

**Other SERVICE NOTES affected:**

N5741A-01, N5742A-01, N5743A-01, N5744A-01, N5745A-01, N5746A-01, N5747A-01, N5748A-01  
N5749A-01, N5750A-01, N5751A-01, N5752A-01, N5761A-01, N5762A-01, N5763A-01, N5764A-01,  
N5765A-01, N5766A-01, N5767A-01, N5768A-01, N5769A-01, N5770A-01, N5771A-01, N5772A-01