6634B-09

SERVICE NOTE

Supersedes: NONE

Agilent 6634B DC Power Module

Serial Numbers: ALL

There is a possible glitch on the output due to an AC Line sag between 23 VAC to 27 VAC.

Parts Required:

P/N Description Qty.

1901-1344 Diode 1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	X ON SPECIFIED FAILURE [[]] AGREEABLE TIME	STANDARDS LABOR: 0.5 Hours	
LOCATION CATEGORY:	[[]] CUSTOMER INSTALLABLE [[]] ON-SITE X SERVICE CENTER [[]] CHANNEL PARTNER	SERVICE [[]] RETURN INVENTORY: [[]] SCRAP X SEE TEXT	USED [[]] RETURN PARTS: [[]] SCRAP X SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE		NO CHARGE AVAILABLE UNTIL: 31-JAN-2012	
AUTHOR: WIU		PRODUCT LINE: SP	
ADDITIONAL INFORMATION:			

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Situation:

There is a possible glitch on the output due to an AC line sag between 23 VAC to 27 VAC. The time length of the glitch pulse is about 1.9s and the power supplied is 2.8W.

It is caused by a condition in which the current offset and voltage offset DACs do not reset, when the current and voltage programming DACs reset during an AC line sag. This results in an op-amp that normally operates at -5V DC to operate in the positive direction, and drives the output of the 6634B on.

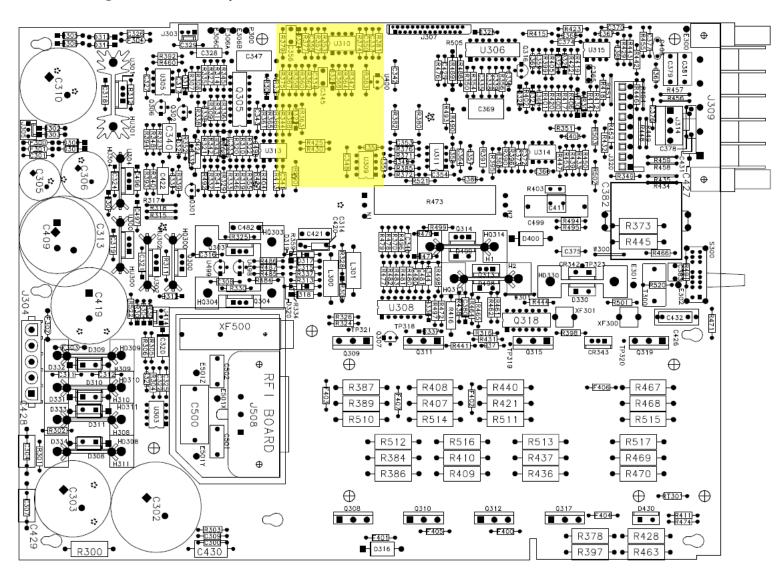
Solution/Action:

The solution is to implement a diode (P/N 1901-1344) that clamps the op-amp to 0.7 V. This prevents the op-amp from driving the output on, and does not affect it due to a normal operation at -5V DC.

The figures below show where to solder the diode (P/N 1901-1344) from R358 to C345 on the A1 main board.

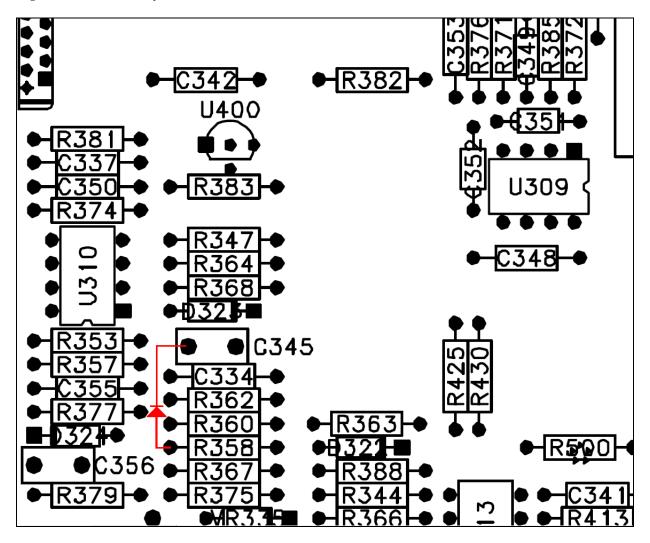
No calibration is necessary.

Figure 1. A1 Board Layout

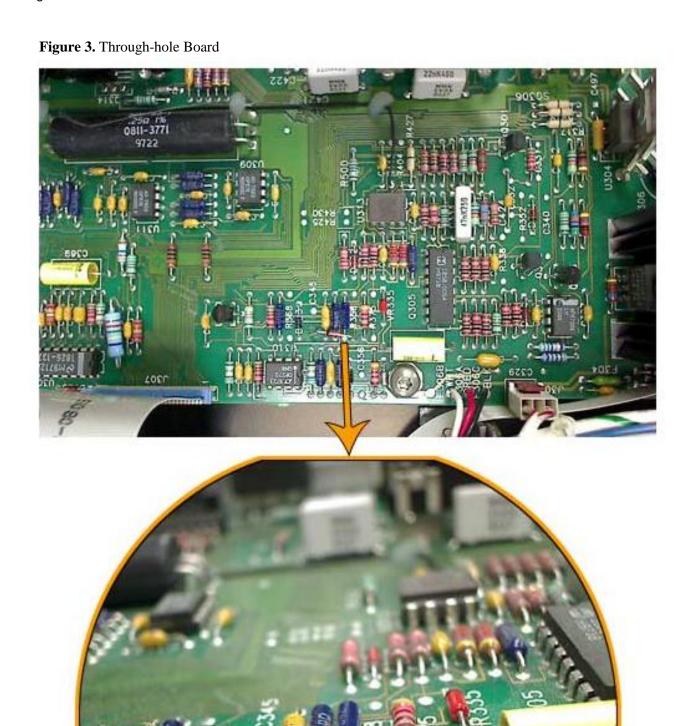


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Figure 2. A1 Board Layout



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Figure 4. Surface-mount Board



