

S E R V I C E N O T E

SUPERSEDES: None

**11982A Lightwave Converter**

**Serial Numbers:** 0000A0000 / 3022A0520  
(see text)

**Additional DC grounding to improve noise performance**

**To Be Performed By:** Agilent-Qualified Personnel

**Parts Required:**

Part No.	Description
8150-0005	17 cm (6 1/2") Black wire #22
0360-0268	Solder Lug

**Situation:**

An intermittent DC return path can cause jumps in the noise level on the instrument output. The DC return path was provided by the braid on the coaxial cable from the power supply to the diode bias on the optoblock. Instruments with a silver colored SMA connector are more susceptible to an intermittent DC return path than instruments with a gold connector. Instruments in the serial number range 3022A0375 to 3022A0520 are the most susceptible.

*Continued*

DATE: May 1995

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:					
<b>MODIFICATION RECOMMENDED</b>					
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input type="checkbox"/> ON SPECIFIED FAILURE <input checked="" type="checkbox"/> AGREEABLE TIME	STANDARDS:	Labor 1.0 hrs		
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 type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT	USED PARTS:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: September 1996			
AUTHOR: BMH	ENTITY: 5360	ADDITIONAL INFORMATION:			



**Solution/Action:**

Add an additional return path between the power supply and the optoblock. Refer to the attached figure in reference to the following procedures.

1. Remove power to the instrument.
2. Remove instrument top cover.
3. Attach solder lug to 17 cm (6 1/2 inch) black #22 wire (8150-0005).
4. Twist this wire around the red and green wires from the power supply to the optoblock. Leave enough wire to solder one end to the terminal with the coaxial braid, and about 6 cm with the solder lug past the other wires.
5. Solder the new black wire to -OUT terminal of E2.
6. Attach solder lug under screw head holding optoblock to chassis.

**WARNING**

Do not lift optoblock assembly off chassis if power supply is active.  
Severe damage to optoblock will result.

