

MODIFICATION RECOMMENDED –
CORRECTS MANUFACTURING OR DESIGN DEFECTS

86146B-01

S E R V I C E N O T E

Supersedes:
NONE

86146B Optical Spectrum Analyzer

Serial Numbers:

US41500104	US41500120	US41500130	US41500187	US41500190	US41500200
US41500109	US41500122	US41500131	US41500188	US41500191	US41500201
US41500111	US41500123	US41500132		US41500192	
US41500112	US41500124	US41500135		US41500193	
US41500114	US41500125	US41500136		US41500194	
US41500117	US41500126			US41500196	
US41500119	US41500127			US41500197	
	US41500128			US41500198	
	US41500129			US41500199	

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input type="checkbox"/> ON SPECIFIED FAILURE <input checked="" type="checkbox"/> AGREEABLE TIME	STANDARDS:	LABOR: 1.0 Hours + Comm. CAL with Data
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
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS:	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AUTHOR: RBS	PRODUCT LINE: PL8F	AGILENT RESPONSIBLE UNTIL: March 30, 2005	
ADDITIONAL INFORMATION: No service inventory – part has not yet been shipped to the field. Bill to O2G.			

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March 25, 2003

Potential servo board failures on 86146B OSA with servo board prefix 0205/0208/0209 .

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

P/N	Description	Qty.
86146-60001	Servo Board	1

Situation:

The 86146-60001 Servo Board uses four identical DSP IC to control four servo channels: grating, slit, x, and y servos. The DSP manufacturer (TI) identified a problem due to a change in their test process, which resulted in them shipping DSPs which may lose memory. These DSPs were installed on servo boards with prefix 0205/0208/0209 (Servo Board S/N format: yymm-xxxxx). The S/N for instruments that were shipped with these servo boards have been identified in this service note.

Note: Good 1822-0734 DSP can be identified on the Servo Board if DSP date code = CF-28xxxxW or later (Aug 2002 or later).

A failure in the DSP could result in the programmed part to lose its' memory. It can be reprogrammed but the problem will likely return. Hence, IC or board level replacement is necessary. The factory will arrange for component level replacement due to the high pin count and fine pitch of the part. The field strategy is board level replacement.

A failure of the grating or slit servos will show an error on the instrument display. A failure of the X or Y servos may not show an error, and could allow the instrument to appear to be functioning normally. In this case, its' amplitude accuracy may be affected due to misalignment and it may report a slightly lower reading than actual, never a higher result.

All units may not fail, but since there is a potential for failure without a clear indication to the customer, we are proactively replacing these servo boards in customer units.

Solution/Action:

1. Replacing the servo board with date code other than that identified above (field), or replacing all four DSP IC on the servo board (factory) will remedy the problem. Refer to the OSA Service Guide, "To Remove the Servo Board" for instructions on how to perform this procedure.
2. The instrument does not have to be recalibrated following this procedure (only a functional test), however LWD has authorized a one-time Commercial CAL with Before/After data for customers who send in their instruments during the "Agilent Responsible Until" timeframe.
3. After rework is complete, create and affix service note label SN86146B-01 to the rear of the instrument.

NOTE: Until the field has 86146B CAL capability, instruments should be returned to the factory to have this service note performed.

End.