

MODIFICATION RECOMMENDED

# DSOX91604A-03

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

Supersedes:  
None

### DSOX91604A 16GHz Digitizing Oscilloscope

Serial Numbers: MY00000000 up to and including MY50270112

Front panel connector may not offer a good ground connection for probes

#### Parts Required:

P/N	Description	Qty.
54916-45001	Inner clutch	4
54916-47401	Outer clutch	4
54916-07101	Spring	4

### ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
<b>MODIFICATION RECOMMENDED</b>			
ACTION CATEGORY:	<input type="checkbox"/> ON SPECIFIED FAILURE <input checked="" type="checkbox"/> AGREEABLE TIME	STANDARDS	LABOR: 1.0 Hour
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER <input type="checkbox"/> CHANNEL PARTNER	SERVICE INVENTORY: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT	USED PARTS: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: End of support life	
AUTHOR: KO	PRODUCT LINE: 1A		
ADDITIONAL INFORMATION:			

© AGILENT TECHNOLOGIES, INC. 2011  
PRINTED IN U.S.A.

August 4, 2011

Rev. 18



**Situation:**

The front panel connector may not provide an adequate ground for N280XA probe amps. You may see more trace noise than you would expect.

You do not need to disassemble the covers from the instrument. If the scope was recently repaired, it is possible the fix was already implemented. You can lightly tap on the outer gray clutch that surrounds the channel input connectors. The clutch will move in a couple of millimeters. If the spring was installed, it should pop back out. Also, if you look carefully, you may see the spring on the input connector. Below is a picture from production showing the spring installed before the front panel connector is installed in the scope. You do not need to remove the front panel connector to install the spring.

Read the entire procedure before starting so you fully understand the process. Some of the pictures are from manufacturing. You do not need to disassemble the scope for this repair.

**Solution/Action:**

1. Find a soft strap or something similar to remove the clutch from the front panel connector. Do not use anything metallic to pry the clutch away from the front panel. You will scratch and damage the front panel.



2. Put the soft strap or string behind the gray outer clutch and carefully work it around the outer clutch.



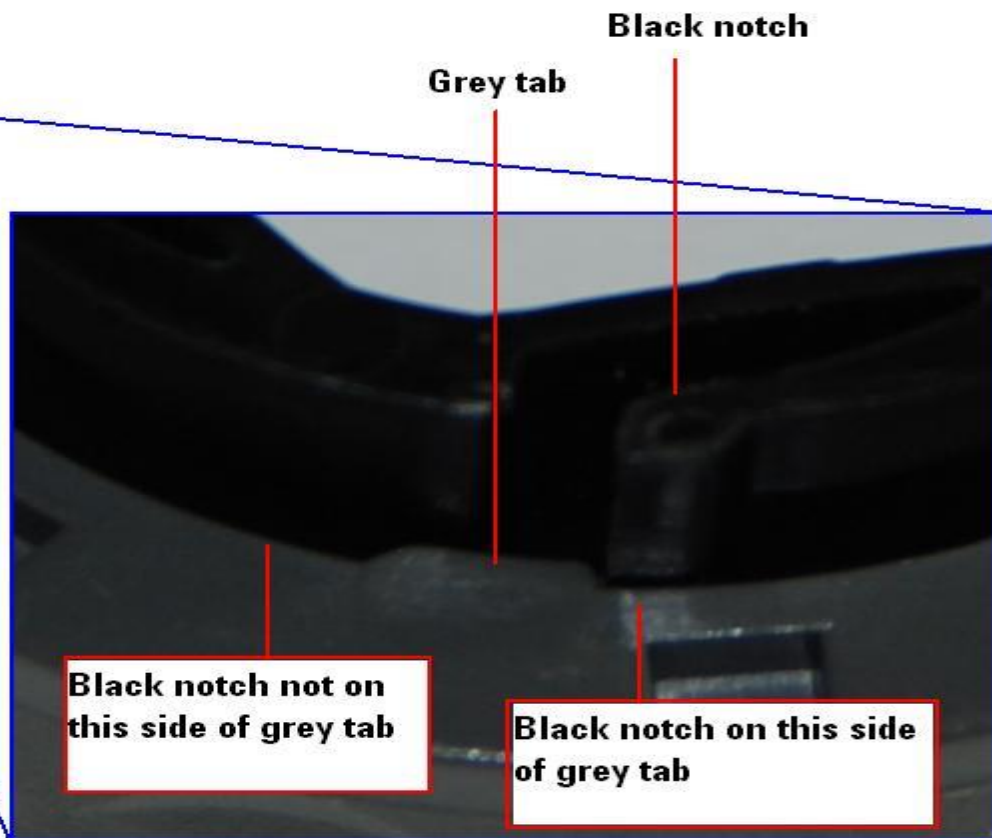
3. Slowly pull the strap or string to remove the clutch from the front panel.



4. Slip the spring behind the bulk head connector as illustrated below.



5. The inner clutch is always damaged when removed from the scope. Do not reuse the old inner and outer clutches. Align the notch on the inner clutch with the notch on the outer clutch as shown below. If you misalign the inner clutch, you will damage it when you press it into place. The mechanical design makes it hard to press a misaligned inner clutch into the outer clutch, but if you try hard enough, you can damage the inner clutch. Press the new inner clutch into the outer clutch. When properly aligned, it will still take a lot of finger pressure to press the inner clutch into the outer clutch.



**Black notch**

**Grey tab**

**Black notch not on this side of grey tab**

**Black notch on this side of grey tab**



6. Press the assembled clutch onto the front panel.



7. Repeat the above steps for all four front panel connectors.