

MODIFICATION RECOMMENDED

# DSOX93204A-03

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

Supersedes:  
None

### DSOX93204A 32GHz Digitizing Oscilloscope

Serial Numbers: MY00000000 up to and including MY50270103

**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<br><input checked="" type="checkbox"/> AGREEABLE TIME   | STANDARDS   | LABOR: 1.0 Hour  |
| LOCATION CATEGORY:              | <input type="checkbox"/> CUSTOMER INSTALLABLE<br><input type="checkbox"/> ON-SITE<br><input checked="" type="checkbox"/> SERVICE CENTER<br><input type="checkbox"/> CHANNEL PARTNER | SERVICE INVENTORY: <input type="checkbox"/> RETURN<br><input type="checkbox"/> SCRAP<br><input type="checkbox"/> SEE TEXT | USED PARTS: <input type="checkbox"/> RETURN<br><input type="checkbox"/> SCRAP<br><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:         |   |   |  |

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**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.



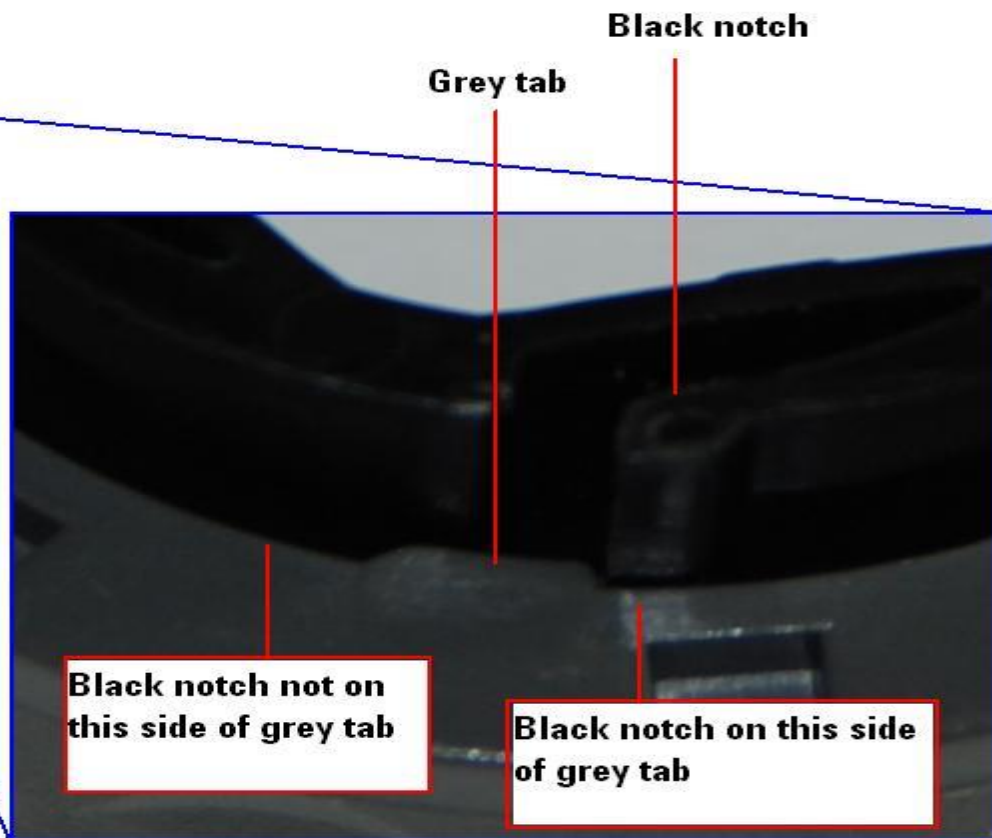
3. Slowly pull the strap or string to remove the clutch from the front panel.



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.





6. Press the assembled clutch onto the front panel.



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