

DSOX4154A-04-S

Safety Service Note

Implemented During Normal Course of Providing Support

Supersedes: [NONE]

DSOX4154A Oscilloscope: 1.5 GHz, 4 Analog Channels

Serial Numbers: MY58250323, MY58250324

POSSIBLE "SHOCK" HAZARD

WARNING

HAZARD CLASS "2"

Over the past month, Keysight observed failures during the Routine Safety Test. Investigation found a recently changed R101 resistor, from a 39K ohm part to a new 47K ohm part is against the printed circuit board ground plane and insulation breakdown may cause a safety concern. This issue is limited to the serial numbers listed above.

Parts Required:

P/NDescriptionQty.54709-66424, rev 011PCA – Line Filter Board1

ADMINISTRATIVE INFORMATION

ACTION CATEGORY:	[[]] ON SPECIFIED FAILURE [[x]] AGREEABLE TIME	STANDARDS LABOR: 2.0 Hours
LOCATION CATEGORY:	[[]] CUSTOMER INSTALLABLE [[]] ON-SITE (active On-site contract required) x SERVICE CENTER [[]] CHANNEL PARTNERS	SERVICE: [[]] RETURN USED [[]] RETURN INVENTORY: [[x]] SCRAP PARTS: [[x]] SCRAP [[]] SEE TEXT
AVAILABILITY	: ALWAYS	NO CHARGE AVAILABLE UNTIL: EOS
	[[x]] Calibration Required [[]] Calibration NOT Required	PRODUCT LINE: PL1B AUTHOR: JS

ADDITIONAL INFORMATION:

Calibration is ONLY required if the unit fails Performance Verification after the line filter board has been replaced.



Situation:

While the oscilloscope has technically passed all testing and meets product specifications, in an abundance of caution Keysight is recalling and repairing these specific oscilloscopes to ensure the oscilloscope meets the specifications required for Basic insulation by the IEC/UL/CSA 61010-1 standard.

Solution/Action:

Keysight addressed the issue by placing a spacer under the R101 resistor and updated the 54709-66424 line filter board from rev 010 to rev 011 to reflect the change. The rework on the oscilloscope, performed by a Keysight Service Center, replaces the rev 010 line filter board (54709-66424) with the rev 011 line filter board as specified in the Keysight InfiniiVision 4000 X-Series Oscilloscope Service Guide.

Service steps to be performed by a Keysight Service Center

- Perform HiPot.
- Replace the 54709-66424, rev 010 line filter board with 54709-66424, version 011 line filter board as specified in the Keysight InfiniiVision 4000 X-Series Oscilloscope Service Guide. The difference between the two revisions is that rev 011 has a spacer under the 47K resister.
- Perform HiPot test
- Perform Hardware Self Test: Utility (key) → Service (softkey) → Hardware Self Test (softkey)
- Do Performance Verification (PV) as specified in the Keysight InfiniiVision 4000 X-Series Oscilloscope Service Guide
 - o If PV fails, perform User Calibration redo PV





Revision History:

Date	Service Note Revision	Author	Reason for Change
11 Dec 2018	01	JS	As Published