E4981A-03

S E R V I C E N O T E

Supersedes:
NONE

"E4981A Capacitance Meter, 120 / 1 kHz / 1 MHz"

Serial Numbers: ALL

Check Cable Outer Resistance condition before performing Impedance Measurement Accuracy Test at 1 pF

Parts Required:

P/N	Description	Qty.
NONE		

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION: **INFORMATION ONLY**	
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ADDITIONAL INFORMATION:	

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Agilent Technologies

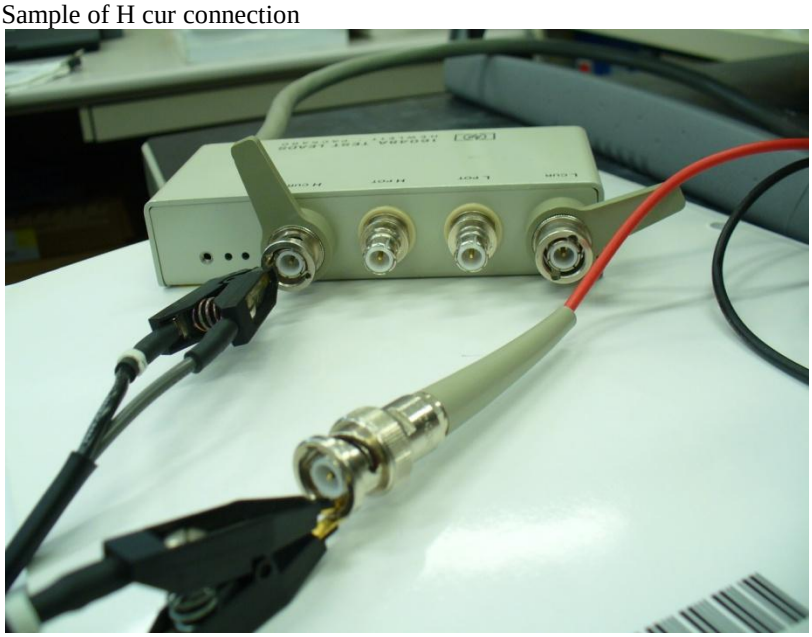
Situation:
Impedance Measurement Accuracy Test is a subset of the E4981A performance test. 1M Cable (16048A) and 2M Cable (16048D) are required to perform the Impedance Measurement Accuracy Test. When the Cable outer resistance is not within the required condition, Impendence Measurement Accuracy test at 1pF becomes out of spec for the rare occasion.

Solution/Action:
Required Instruments and accessories to check the Cable outer resistance

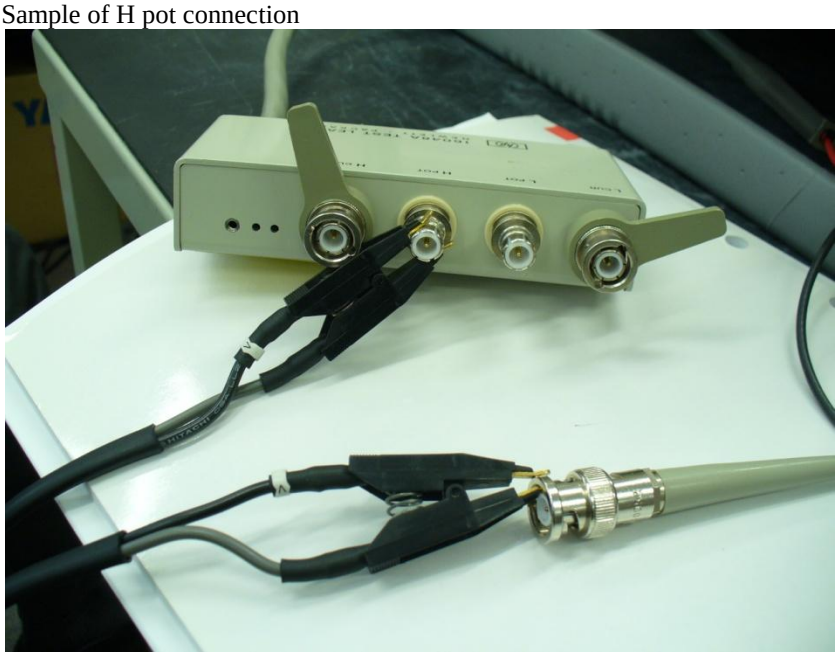
Agilent Model Number (Description)
34401A ,3458A or its equivalent + 11059A (DVM + Kelvin Probe Set)
Or
4338B + 16143B + 16005-60011 x 2ea (Milliohm Meter + Mating Cable + Kelvin Clip Lead)

Step.1 connect Kelvin clip to Cable outer

Sample of H cur connection



Sample of H pot connection



Step.2 Check L cur, L pot, H pot and H cur outer resistance whether outer resistance is within the following condition.

Cable Length	Product Number	Required condition
1M	16048A/B	62 m Ohm or below
2M	16048D	90 Ohm or below

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