

S E R V I C E N O T E

SUPERSEDES: NONE

54603B Oscilloscope**Serial Numbers:** 0000A00000 / 9999A99999**Voltage Measurement Accuracy****Situation:**

Due to confusion caused by the different ways accuracy is calculated for calibration and general use, the calibration routine for voltage measurement accuracy has been modified.

To calculate the cursor accuracy for the 54603B oscilloscope, the algorithm remains the same:

Single cursor accuracy:

(vertical accuracy $\pm 1.2\%$) of full scale $\pm(0.5\%)$ of position value

Dual cursor accuracy:

(vertical accuracy $\pm 0.4\%$) of full scale

Where vertical accuracy is defined as 2%, or about 3.5% for vernier ranges.

The test limits for the calibration routine for voltage measurement accuracy has been modified to follow the dual cursor accuracy specifications exactly (non-vernier range).

Continued

DATE: January 1996

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

INFORMATION ONLY

AUTHOR:

CLD

ENTITY:

0840

ADDITIONAL INFORMATION:

Solution/Action:

Calibration routines for voltage measurement accuracy should be modified to the table below.

Range	Reading	Limits
5V/div	35V	34.04 to 35.96V
2V/div	14V	13.62 to 14.38V
1V/div	7V	6.808 to 7.192V
0.5V/div	3.5V	3.404 to 3.596V
0.2V/div	1.4V	1.362 to 1.438V
0.1V/div	0.7V	680.8 to 719.2msV
50mV/div	350mV	340.4 to 359.6mV
20mV/div	140mV	136.2 to 143.8mV
10mV/div	70mV	68.08 to 71.92mV
(1)5mV/div	35mV	33.08 to 36.92mV
(1)2mV/div	14mV	12.08 to 15.92mV

(1) Full scale is 80 mV