*TB 9-6625-2325-35

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR TRUE RMS VOLTMETER JOHN FLUKE, MODELS 8920A AND 8921A

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REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

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			Paragraph	Page
SECTION	I.	IDENTIFICATION AND DESCRIPTION		
		Test instrument identification	1	2
		Forms, records, and reports	2	2
		Calibration description	3	2
	II.	EQUIPMENT REQUIREMENTS		
		Equipment required	4	3
		Accessories required	5	3
	III.	CALIBRATION PROCESS		
		Preliminary instructions	6	5
		Equipment setup	7	5
		Low and midband accuracy	8	6
		High frequency response	9	8
		dB display mode	10	11
		Linear analog output (model 8920A only)	11	12
		Power supply	12	12
		Final procedure	13	13

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*This bulletin and TB 9-6625-2324-35 supersede TB 9-6695-258-35, dated 28 August 1995.

SECTION I
IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of True RMS Voltmeter, John Fluke, Models 8920A and 8921A. The manufacturer's manual was used as the prime data source in compiling these instructions. The equipment being calibrated will be referred to as the TI (test instrument) throughout this bulletin.

a. Model Variations. Model 8920A has BNC input and model 8921A has double banana input.

b. Time and Technique. The time required for this calibration is approximately 2 hours, using the dc and low frequency technique.

2. Forms, Records, and Reports

a. Forms, records and reports required for calibration personnel at all levels are prescribed by TB 750-25.

b. Adjustments to be reported are designated (R) at the end of the sentence in which they appear. When adjustments are in tables, the (R) follows the designated adjustment. Report only those adjustments made and designated with (R).

3. Calibration Description. TI parameters and performance applications which pertain to this calibration are in table 1.

Table 1. Calibration Description

Test instrument parameters	Performance Specifications							
Ac voltage	Range: 0 to 700 V Accuracy: ±% of voltage reading or (± dB)							
		Range						
	Frequency[1]	2 mV	20 mV	200 mV	2 V	20 V	200 V	700 V
	10 to 20 Hz	5 (.5)						
	20 to 50 Hz	3 (.35)	2 (.25)	1(.15)				
	50 Hz to 200 kHz	2 (.25)	1 (.15)	.5 (.5)				
	200 kHz to 1 MHz	3 (.35)	2 (.25)	.7 (.15)				
	1 to 2 MHz	4 (.4)		3 (.35)			N/A	
	2 to 10 MHz	N/A	4 (.4)	3 (.35)			N/A	
	10 to 20 MHz	N/A	5 (.5)				N/A	

See footnotes at end of table.