*TB 9-6625-2114-35

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR MULTIMETER, ME-26( )/U AND HEWLETT-PACKARD MODELS 410B, 410BR, AND 410C

Headquarters, Department of the Army, Washington, DC
18 March 2002

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REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this publication. If you find any mistakes or if you know of a way to improve the procedure, please let us know. Mail your letter or DA Form 2028 to: Commander, U. S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5230. A reply will be furnished to you. You may also send in your comments electronically to our e-mail address: *2028@redstone.army.mil* or by FAX (256) 842-6546/DSN 788-6546.

*This bulletin supersedes TB 9-6625-2114-35, dated 24 April 1995.

SECTION I
IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of Multimeter, ME-26( )/U and Hewlett-Packard, Models 410B, 410BR, and 410C. The manufacturer's manuals and TM 11-6625-200-15 were used as the prime data sources in compiling these instructions. The equipment being calibrated will be referred to as the TI (test instrument) throughout this bulletin.

a. Model Variations. Variations among models are described in text.

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 a sentence in which they appear. Report only those adjustments made and designated with (R).

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

Table 1. Calibration Description

Test instrument parameters	Performance specifications
Multimeter ME-26( )/U and Hewlett-Packard, Models 410B and 410BR	
Dc voltage	Range: 0 to +1000 V[1] Accuracy: ±3% FS
Ac voltage	Range: 0 to 300 V2 Accuracy: ±3% FS at 400 Hz
Frequency response Models 410B, 410BR, ME-26( )/U	Referenced to 400 Hz: ±1 dB: 20 Hz to 300 MHz ±3 dB: 300 to 500 MHz[3]
Resistance	Range: 0 to 500 MΩ Accuracy at midscale: ±1Ω on RX1 range ±5% on all other ranges
Hewlett-Packard, Model 410C	
Dc voltage	Range: 0 to +1500 V[4] Accuracy: ±2% FS
Ac voltage	Range: 0 to 300 V Accuracy: ±3% FS at 400 Hz
Frequency response	Referenced to 400 Hz: ±10%: 20 to 100 Hz ±2%: 100 Hz to 50 MHz ±4%: 50 to 100 MHz ±1.5 dB: 100 to 500 MHz[3]
Resistance:	Range: 0 to 500 MΩ Accuracy: 0 to midscale: ±5% of reading or: ±2% of midscale, whichever is greater. ±7% from midscale to scale value of 2. ±8% from scale value of 2 to 3 ±9% from scale value of 3 to 5 ±10% from scale value of 5 to 10
Dc current	Range: 0 to +150 mA Accuracy: ±3% FS

[1]Range extended to 30 kV with use of dc divider supplied with TI. Accuracy of dc divider is ±5%.

[2]Range extended to 900 V with use of capacity divider supplied with TI. Accuracy of capacity divider is ±1%.

[3]Instrument capability is to 700 MHz, but only checked to 500 MHz.

[4]Not verified above 1000 V dc.

SECTION II
EQUIPMENT REQUIREMENTS

4. Equipment Required. Table 2 identifies the specific equipment to be used in this calibration procedure. This equipment is issued with Secondary Transfer Calibration Standards Set, AN/GSM-286. Alternate items may be used by the calibrating activity. The items selected must be verified to perform satisfactorily prior to use and must bear evidence of current calibration. The equipment must meet or exceed the minimum use specifications listed in table 2. The accuracies listed in table 2 provide a four-to-one ratio between the standard and TI.

5. Accessories Required. The accessories required for the calibration are common usage accessories, issued as indicated in paragraph **4** above and are not listed in this calibration procedure. The following peculiar accessory is also required for this calibration: Probe, T-connector, P/N 11042/455A) (8899531).

Table 2. Minimum Specifications of Equipment Required

Common name	Minimum use specifications	Manufacturer and model (part number)
CALIBRATOR	Range: 0 to 315 V ac at 400 Hz 891 to 909 V ac at 10 kHz Accuracy: ±0.75% Range: 0 to 1030 V dc Accuracy: ± 0.5% Range: 0 to 150 MA dc Accuracy: ± 0.75%	John Fluke, Model 5700A/EP UGP (p/o MIS-35947); w/power amplifier, John Fluke, Model 5725A/AR (MIS-45844); w/ac divider, John Fluke, Model 7405A-4207 (7405A-4207)
DIGITAL MULTIMETER	Range: 4.9 to 6.4 V ac 0 to 51.5 mV dc Accuracy: ±0.75%	John Fluke, Model 8840A/AF 05/09 (AN/GSM-64D)
LEVELED SINEWAVE GENERATOR	Frequency range: 1 to 100 MHz Amplitude Accuracy: ±1% 1 to 250 MHz ±7.5% 250 to 500 MHz	Tektronix, Model SG-5030 (p/o MIS 38938/1)
RESISTANCE STANDARD NO. 1	Range: 0 to 1.1 MΩ Accuracy: ± 1.25%	Biddle-Grey, Model 71-631 (7910328)
RESISTANCE STANDARD NO. 2	Range: 0 to 10 MΩ Accuracy: ± 1.25%	Beckman, Model CR10M (8598965)

SECTION III
CALIBRATION PROCESS FOR MULTIMETERS, ME-26( )/U, AND HEWLETT-PACKARD, MODELS 410B AND 410BR

6. Preliminary Instructions

a. The instructions outlined in paragraphs **6** and **7** are preparatory to the calibration process. Personnel should become familiar with the applicable sections before beginning the calibration.

b. Items of equipment used in this procedure are referenced within the text by common name as listed in table 2.

c. Unless otherwise specified, verify the result of each test and, whenever the test requirement is not met, take corrective action before continuing with the calibration. Adjustments required to calibrate the TI are included in this procedure. Additional maintenance information is contained in the manufacturer's manuals and TM 11-6625-200-15 for this TI.

d. Unless otherwise specified, all controls and control settings refer to the TI.

7. Equipment Setup

WARNING

HIGH VOLTAGE is used or exposed during the performance of this calibration. DEATH ON CONTACT may result if personnel fail to observe safety precautions. REDUCE OUTPUT(S) to minimum after each set within the performance check where applicable.

NOTE

The **FUNCTION** and **SELECTOR** switches are functionally identical and will be referred to as the **SELECTOR** switch throughout this section.

a. Remove protective cover from TI only when necessary to make adjustments. Replace cover after completing the adjustments.

b. Connect TI to a 115 V ac source. Press **POWER** pushbutton to on.

c. Set **SELECTOR** switch to **-** and **RANGE** switch to **RX1 1V** and allow at least 15 minutes for warmup.

d. Set **SELECTOR** switch to **OFF** and wait 30 seconds. If meter pointer does not indicate 0, adjust meter mechanical zero for 0 indication.

8. Dc Voltage

a. Performance Check

(1) Set **SELECTOR** switch to **+**.

(2) Connect **DC** probe and **COMMON** lead together and adjust **ZERO ADJ** for **0** meter indication.

(3) Connect **DC** probe and **COMMON** lead to calibrator.

(4) Adjust calibrator for a full scale indication on TI. If calibrator does not indicate between 0.970 and 1.030 V, perform **b** below.

(5) Repeat technique of (4) above, using settings listed in table 3. Calibrator will indicate within limits specified.

Table 3. Dc Voltage and Tracking

Test instrument		Calibrator indications (V dc)	
RANGE switch settings	Indications	Min	Max
RX1 1V	.6	.570	.630
RX1 1V	.2	.170	.230
RX10 3V	3.0	2.910	3.090
RX100 10V	1.0[1]	9.70	10.30
RX1K 30V	3.0	29.10	30.90
RX10K 100V	1.0	97.0	103.0
RX100K 300V	3.0	291.0	309.0
RX1M 1000V dc only	1.0	970.0	1030.0

[1]After this check, and only if dc voltage divider is supplied with TI, set calibrator to 9.0 V. Record TI indication (reference point) for use in (9) below).

NOTE

Perform (6) thorough (9) below only if dc voltage divider is supplied with TI.

(6) Set **RANGE** switch to **RX100 10V**.

(7) Connect dc voltage divider to **DC** probe. Connect dc voltage divider and **COMMON** lead together and adjust **ZERO ADJ** for **0** meter indication.

(8) Connect dc voltage divider and **COMMON** lead to calibrator.

(9) Adjust calibrator for TI indication recorded in table 3. Calibrator will indicate between 855.0 and 945.0 V.

b. Adjustments

(1) Set calibrator to 1.000 V.

(2) Adjust R32 CAL DC (fig. 1) for indication of 1 V (R).

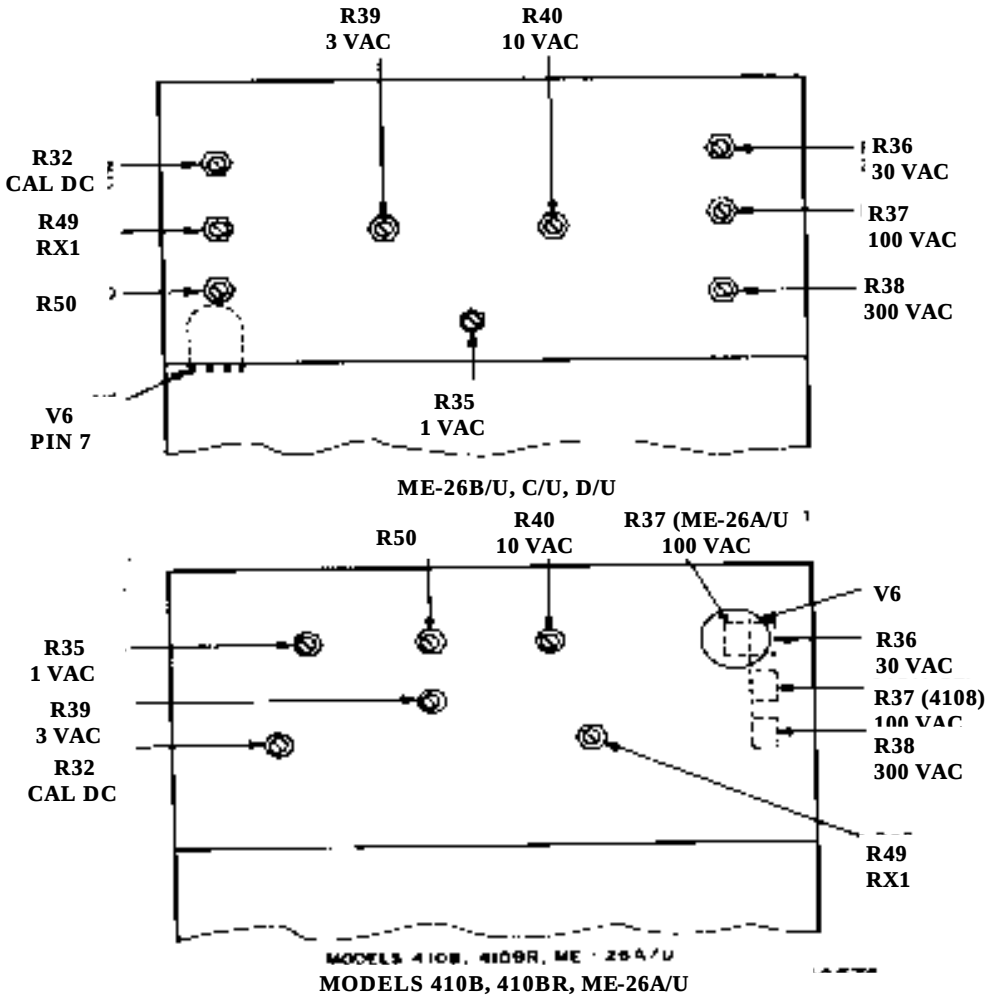

Figure 1. Adjustment locations - rear view.

9. Ac Voltage

a. Performance Check

(1) Set **SELECTOR** switch to **AC** and **RANGE** switch to **RX1 1V**.

(2) Connect **AC** probe and **COMMON** lead together and adjust **AC ZERO** for 0 meter indication.

(3) Connect **AC** probe and **COMMON** lead to calibrator.

(4) Adjust calibrator frequency for 400 Hz, and output for full-scale indication on TI. If calibrator does not indicate between 0.970 and 1.030 V, perform **b** below.

(5) Repeat technique of (4) above using settings listed in table 4. If calibrator does not indicate within specified limits, set calibrator to nominal value and perform adjustments listed in table 4 for full scale indication on TI.

Table 4. Ac Voltage and Adjustments

Test instrument		Calibrator indications (V ac)		Adjustments (fig. 1) (R)
RANGE switch settings	Indications	Min	Max	
RX10 3V	3	2.910	3.090	R39 3 VAC
RX100 10V	11	9.70	10.30	R40 10 VAC
RX1K 30V	3	29.10	30.90	R36 30 VAC
RX10K 100V	1	97.0	103.0	R37 100 VAC
RX100K 300V	3	291.0	309.0	R38 300 VAC

[1]After this check, and only if capacitive voltage divider is supplied with TI, adjust calibrator frequency to 10 kHz and amplitude to 9.0 V. Record TI indication (reference point) for use in (9) below. Readjust calibrator frequency to 400 Hz for remaining ranges.

NOTE

Perform (6) through (9) below only if capacitive voltage divider is supplied with TI.

(6) Set **RANGE** switch to **R100 10V**.

(7) Connect capacitive voltage divider to **AC** probe. Connect capacitive voltage divider and **COMMON** lead together and adjust **AC ZERO** for 0 meter indication.

(8) Connect capacitive voltage divider and **COMMON** lead to calibrator.

(9) Adjust calibrator frequency to 10 kHz and amplitude for TI indication recorded in table 4. Calibrator will indicate between 891.0 and 909.0 V.

b. Adjustments

(1) Connect digital multimeter between pin 7 of V6 (fig. 1) and ground. If digital multimeter does not indicate between 4.9 and 5.1 V ac (for ac probe diode 2-01C) or 6.2 and 6.4 V ac (for ac probe diode EA53), adjust R50 (fig. 1) for 5 V ac or 6.3 V ac as applicable (R).

(2) Set calibrator to 1.000 V.

(3) Adjust R35 1 VAC (fig. 1) for indication of 1 V (R).

10. Frequency Response

a. Performance Check

(1) Set **RANGE** switch to **RX1 1V**.

(2) Connect **AC** probe and **COMMON** leads together and adjust **AC ZERO** for 0 indication on TI.

(3) Connect equipment as shown in figure 2.

(4) Adjust leveled sinewave generator for 400 Hz and a .3 V ac indication on TI.

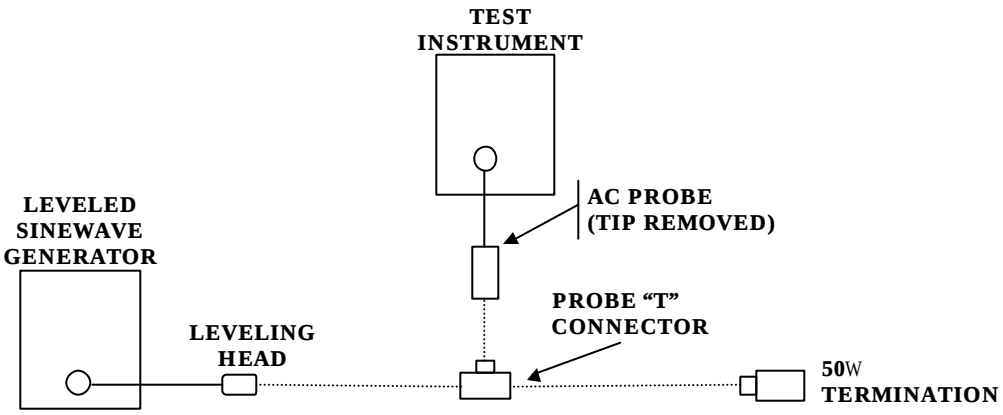

Figure 2. Frequency response - equipment setup.

(5) Set leveled sinewave generator to display dBm and record indication.

(6) Press leveled sinewave generator **FREQ VARIABLE** pushbutton sweep frequency from 20 Hz to 300 MHz while maintaining .3V reference on TI. Programmable leveled sinewave generator's dB readout on indicate between $\pm$1 db of reading recorded in (5) above.

(7) Sweep frequency from 300 Hz to 500 MHz while maintaining .3 V reference on TI. Leveled sinewave generator's dB readout will indicate between $\pm$ 3 db of reading recorded in (5) above.

b. Adjustments. No adjustments can be made.

11. Resistance

a. Performance Check

(1) Set **SELECTOR** switch to **OHMS**.

(2) Adjust **OHMS ADJ** for ¥ meter indication.

(3) Short **OHMS** and **COMMON** leads together and adjust **ZERO ADJ** for 0 meter indication.

(4) Separate **OHMS** and **COMMON** leads.

(5) Repeat (2) through (4) above until no further adjustment is necessary.

(6) Connect **OHMS** and **COMMON** leads to resistance standard No. 1.

(7) Adjust resistance standard for 10Ω indication on TI. If resistance standard setting is not between 9Ω and 11Ω, perform **b** below.

(8) If no adjustment was necessary in (7) above, proceed to (9) below. If adjustment was necessary, repeat (2) through (7) above. Resistance standard setting will be between 9Ω and 11Ω.

(9) Repeat technique of (2) through (7) above for **RANGE** switch settings and indications in table 5. Resistance standard settings will be within limits specified in table 5.

Table 5. Resistance

Test instrument		Resistance standard indications	
RANGE switch settings	Indications (OHMS scale)	Min	Max
RX10 3V	10	95Ω	105Ω
RX100 10V	10	950Ω	1050Ω
RX1K 30V	10	9.5 kΩ	10.5 kΩ
RX10K 100V	10	95 kΩ	105 kΩ
RX100K 300V	10	.95 MΩ	1.05 MΩ
RX1M 1000V dc only[1]	10	9.5 MΩ	10.5 MΩ

[1]Connect resistance standard No. 2 in series with resistance standard No. 1.

b. Adjustments

(1) Remove **OHMS** lead from resistance standard and set **RANGE** switch to **RX10 3V**. Adjust **OHM ADJ** for ¥ meter indication.

(2) Set **RANGE** switch to **RX1 1V**. Adjust **R49 RX1** (fig. 1) for ¥ meter indication (R).

12. Final Procedure

a. Deenergize and disconnect all equipment and reinstall protective cover on TI.

b. Annotate and affix DA label/form in accordance with TB 750-25.

SECTION IV
CALIBRATION PROCESS FOR
MULTIMETER, HEWLETT-PACKARD, MODEL 410C

13. Preliminary Instructions

a. The instructions outlined in paragraphs **13** and **14** are preparatory to the calibration process. Personnel should become familiar with the applicable sections before beginning the calibration.

b. Items of equipment used in this procedure are referenced within the text by common name as listed in table 2.

c. Unless otherwise specified, verify the result of each test and, whenever the test requirement is not met, take corrective action before continuing with the calibration. Adjustments required to calibrate the TI are included in this procedure. Additional maintenance information is contained in the manufacturer's manuals and TM 11-6625-200-15 for this TI.

d. Unless otherwise specified, all controls and control settings refer to the TI.

14. Equipment Setup

WARNING

HIGH VOLTAGE is used or exposed during the performance of this calibration. DEATH ON CONTACT may result if personnel fail to observe safety precautions. REDUCE OUTPUT(S) to minimum after each step within the performance check where applicable.

a. Connect TI to 115 V ac source.

b. Energize TI and allow at least 20 minutes to warm up and stabilize.

c. Deenergize TI and wait 30 seconds. If meter pointer does not indicate 0, adjust mechanical zero for 0 indication.

d. Energize TI.

15. Dc Voltage

a. Performance Check

(1) Set **FUNCTION** switch to **+DCV** and **RANGE** switch to **.5V**.

(2) Connect **DCV** probe and **COM** lead together. If TI meter does not indicate 0, perform **b**(1) and (2) below.

(3) Set **FUNCTION** switch to **-DCV**. If TI meter does not indicate 0, perform **b**(3) below.

(4) Set **RANGE** switch to each range. Zero offset will not exceed ±1 percent of full scale for any range.

(5) Set **FUNCTION** switch to **+DCV** and repeat technique of (4) above.

(6) Set **RANGE** switch to .**015V**.

(7) Connect **DCV** probe and **COM** lead to calibrator.

(8) Adjust calibrator for a full-scale indication on TI. If calibrator does not indicate between 0.01470 and 0.01530 V, perform **b**(4) and (5) below.

(9) Repeat technique of (8) above, using settings listed in table 6. If calibrator does not indicate within limits specified, set calibrator to nominal value and perform adjustments listed in table 6 for full-scale indication on TI.

Table 6. Dc Voltage and Tracking

Test instrument		Calibrator indications (V)		Adjustments (fig 3) (R)
RANGE switch settings	Indications (V)	Min	Max	
.05V	0.05	0.0490	0.0510	R18
.15V	0.15	0.1470	0.1530	R18
.5V	0.5	0.490	0.510	R30
1.5V	1.5	1.470	1.530	R30
5V	5.0	4.90	5.10	R30
5V	3.0	2.90	3.10	- - -
5V	1.0	0.90	1.10	- - -
15V	15.0	14.70	15.30	R30
50 V	50.0	49.0	51.0	R30
150V	150.0	147.0	153.0	R30
500V	500.0	490.0	510.0	R30
1500V	1000.0	970.0	1030.0	R30

NOTE

R18 affects all ranges and R30 affects ranges above 0.15 V. Because of interaction, adjustment of R18 and R30 (fig. 3) may have to be repeated until TI voltage indications are within specified limits.

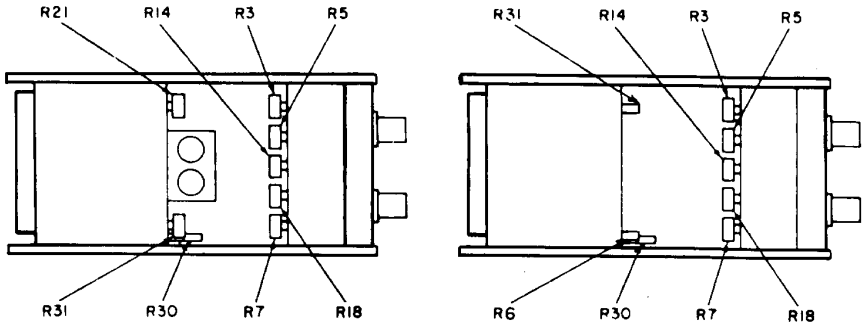

Figure 3. Adjustment locations - top view.

b. Adjustments

(1) Adjust R21 (fig. 3) fully ccw, then adjust approximately 20 degrees cw (only SN 0982A22438 and below) (R).

(2) Adjust **ZERO ADJ** (rear of TI) for 0 meter deflection (may not appear on TI below SN 550).

(3) Adjust **ZERO ADJ** to return meter pointer halfway back to 0. For SN 0982A22439 and above, adjust R6 (fig. 3) until TI meter indicates 0 with **FUNCTION** switch in both **+DCV** and **-DCV** positions.

(4) Adjust calibrator output to 0.0150 V.

(5) Adjust R18 (fig. 3) for 0.015 V indication on TI (R).

16. Ac Voltage

a. Performance Check

(1) Set TI controls as listed in (a) through (c) below:

(a) **FUNCTION** switch to **ACV**.
(b) **RANGE** switch to **.5V**.
(c) **AC ZERO** control to center of its rotation.

(2) Connect **AC** probe and **COM** lead together. If TI meter does not indicate **0**, perform **b**(1) and (2) below.

(3) Connect **AC** probe and **COM** lead to calibrator.

(4) Adjust calibrator frequency for 400 Hz and output for a full-scale indication on TI. If calibrator does not indicate between 0.4850 and 0.5150 V ac, perform **b**(3) and (4) below.

(5) Repeat technique of (4) above, using settings listed in table 7. If calibrator does not indicate within limits specified, set calibrator to nominal value and perform adjustments listed in table 7 for full-scale indication on TI.

Table 7. Ac Voltage

Test instrument		Calibrator indications (V ac)		Adjustments (fig. 3) (R)
RANGE switch settings	Indications (V ac)	Min	Max	
1.5V	1.5	1.4550	1.5450	R5
5V	5	4.850	5.150	R7
15V	15	14.550	15.450	R14[1]
50V	50	48.50	51.50	R14
150V	150	145.50	154.50	R14
500V	300	285.0	315.0	R14

[1]Adjust R14 for **RANGE** settings of 15 to 500 V ac. Select R14 compromise setting which will provide best overall results for these ranges.

b. Adjustments

(1) Adjust R31 (fig. 3) for 0 indication on TI (R).

(2) Fine adjust **AC ZERO** control for **0** indication on TI.

(3) Adjust calibrator for a 0.5 V indication.

(4) Adjust R3 (fig. 3) for a 0.5 V indication on TI (R).

17. Frequency Response

a. Performance Check

(1) Set **RANGE** switch to .**5V**.

(2) Connect **AC** probe and **COM** leads together and adjust **AC ZERO** for **0** indication on TI.

(3) Connect equipment as shown in figure 2.

(4) Adjust leveled sinewave generator for 400 Hz and a .3 indication on TI.

(5) Press leveled sinewave generator **FREQ VARIABLE** pushbutton and sweep frequency from 20 Hz to 100 Hz while maintaining .3 V indication on TI. Programmable leveled sinewave generator will indicate between .763 and .933 V ac.

(6) Sweep frequency from 100 Hz to 50 MHz while maintaining .3 V indication on TI. Leveled sinewave generator will indicate between .831 and .865 V ac.

(7) Sweep frequency from 50 MHz to 100 MHz while maintaining .3 V indication on TI. Leveled sinewave generator will indicate between .814 and .882 V ac.

(8) Sweep frequency from 100 MHz to 500 MHz while maintaining .3 V indication on TI. Leveled sinewave generator will indicate between .711 and 1.01 V ac.

b. Adjustments. No adjustments can be made.

18. Resistance

a. Performance Check

(1) Set **FUNCTION** switch to **OHMS** and **RANGE** switch to **RX10M**.

(2) Adjust **OHMS ADJ** (rear of TI) for ¥ meter indication.

(3) Connect **DCA OHMS** and **COM** leads together and adjust **ZERO ADJ** (rear of TI) for 0 meter indication.

(4) Separate **DCA OHMS** and **COM** leads.

(5) Repeat (2) through (4) above until no further adjustments are necessary.

(6) Connect **DCA OHMS** and **COM** leads to resistance standard No. 1.

(7) Set **RANGE** switch to **RX10**.

(8) Adjust resistance standard for 1Ω indication on TI. Resistance standard will indicate between 9.5Ω and 10.5Ω.

(9) Repeat technique of (7) and (8) above, using settings listed in table 8. Resistance standard indications will be within limits specified.

b. Adjustments. No adjustments can be made.

Table 8. Resistance

Test instrument		Resistance standard indications	
RANGE switch settings	Indications (OHMS scale)	Min	Max
RX100	1	95Ω	105Ω
RX1K	1	950Ω	1050Ω
R10K	1	9.5 kΩ	10.5 kΩ
RX100K	1	95 kΩ	105 kΩ
RX1M	1	.95 MΩ	1.05 MΩ
RX10M1	1	9.5 MΩ	10.5 MΩ

[1]Connect resistance standard No. 1 in series with resistance standard No. 2.

19. Dc Current

a. Performance Check

(1) Set **FUNCTION** switch to **+DCA** and **RANGE** switch to **150 MA**.

(2) Connect **DCA OHMS** and **COM** leads to calibrator.

(3) Adjust calibrator for a full scale indication on TI. Calibrator will indicate within limits specified in table 9.

(4) Repeat technique of (3) above using settings listed in table 9.

Table 9. Dc Current

Test instrument		Calibrator indications	
RANGE switch settings	Indications	Min	Max
150 mA	150	145.5	154.5
50 mA	50	48.5	51.5
15 mA	15	14.55	15.45
5 mA	5	4.85	5.15
1.5 mA	1.5	1.455	1.545
.5 mA	.5	.485	.515
150 uA	150	145.5	154.5
50 uA	50	48.5	51.5
15 uA	15	14.55	15.45
5 uA	5	4.85	5.15
1.5 uA	1.5	1.455	1.545

b. Adjustments. No adjustments can be made.

20. Final Procedure

a. Deenergize and disconnect all equipment.

b. Annotate and affix DA label/form in accordance with TB 750-25.

Instructions for Submitting an Electronic 2028

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however, only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" whomever@redstone.army.mil
To: <2028@redstone.army.mil

Subject: DA Form 2028

1. **From**: Joe Smith
2. Unit: home
3. **Address**: 4300 Park
4. **City**: Hometown
5. **St**: MO
6. **Zip**: 77777
7. **Date Sent**: 19-OCT –93
8. **Pub no:** 55-2840-229-23
9. **Pub Title**: TM
10. **Publication Date**: 04-JUL-85
11. Change Number: 7
12. Submitter Rank: MSG
13. **Submitter FName**: Joe
14. Submitter MName: T
15. **Submitter LName**: Smith
16. **Submitter Phone**: 123-123-1234
17. **Problem**: 1
18. Page: 2
19. Paragraph: 3
20. Line: 4
21. NSN: 5
22. Reference: 6
23. Figure: 7
24. Table: 8
25. Item: 9
26. Total: 123
27. **Text**

This is the text for the problem below line 27.

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

OFFICIAL:

JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army

0202809

Distribution:

To be distributed in accordance with IDN 342236, requirements for calibration procedure TB 9-6625-2114-35.