DEPARTMENT OF THE ARMY TECHNICAL BULLETIN
CALIBRATION PROCEDURE FOR
CALIBRATION ADAPTER,
TEKTRONIX TYPES TU-7, 1M1,
067-0521-00, AND 067-0521-01

Headquarters, Department of the Army, Washington, D. C.
28 September 1976

REPORTING OF ERRORS

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*This bulletin supersedes TB 9-4931-444-35, 11 January 1974, including all changes.

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SECTION I
IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification

This bulletin provides instructions for the calibration of Calibration Adapter, Tektronix Types TU-7, 1MI, 067-0521-00, and 067-0521-01. The manufacturer's instruction manuals were used as the prime data source in compiling these instructions. Sections I and II provide instructions for all levels of calibration. Sections III and IV pertain to level A only, and sections V and VI apply to level C only. The equipment being calibrated will be referred to as the 'T"I (test instrument) throughout this bulletin.

a. Model Variations. All calibration adapters listed above are electrically similar instruments. The designator of TU-7 becomes type IMI at S/N 500. IMI becomes type 067-0521-00 at S/N 1387, and 067-0521-00 becomes type 067-0521-01 at S/N 4000. On type 067-0521-01, the REPETITION RATE (LOW, MED, HIGH) switch is replaced with a five-position (1, 4, 15, 80, and 500 kHz) switch. Some types use a UHF connector for the EXT INPUT.

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

2. Calibration Data Card, DA Form 2416

a. Forms, records, and reports required for calibration personnel at all levels are prescribed by TM 38-750, DA Form 2416 must be annotated in accordance with TM 38-750 for each calibration performed.

b. Adjustments to be reported on DA Form 2416 are designated ® at the end of the sentence in which they appear. When adjustments are in tables, the ® will follow the designated adjustment. Report only those adjustments made and designated with ®.

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
Power input requirements	Supplied by Tektronix oscilloscope series 530, 540, and 550
Variable control'	Range: 0.5-v p-p signal must be variable from 0 to 0.6 cm or more
Chopped rate'	Range: 100 kHz; accuracy ±25%. Signal applied to EXT INPUT attenuated approx1000 times.
+ and - pulse amplitude max of vert display.	Range: No more than 3 cm amplitude at min, or no less than 5.5 cm amplitude at
Repetition rate	Range: Low, 5 kHz ±25%; medium, 100 kHz +20% for S/N 1409 to 3999 or 120 kHz ±20% for SIN 100 to 1408; high, 600 kHz ±20%. S/N 4000 and above has a 5-position range switch.
Overshoot ringing	Range: 4-cm display; accuracy t2% of total height of square wave
Gain	Range: Input signal ratio of 250:1; accuracy, _ I %
Rise time	3 nsec or less
Amplitude	Adjusts amplitude of pulse applied to oscilloscope vert ampl when TEST FUNCTION switch is set to + PULSE or -PULSE.
Vertical position	Controls vert position of trace or display on crt in all TEST FUNCTION positions except COMMON MODE.
+ 225V pushbutton	Provides + 225 v at front panel output
+ 225V (banana jack)	+ 225 v source for checking dc bal of each state of distributed vert ampl. Accuracy, ±2%.

'This specification Is for Information only and is not verified in this bulletin.