# *TB 11-6625-238-35

## DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

# CALIBRATION PROCEDURE FOR TELEPHONE CARRIER SYSTEM TEST FACILITIES KIT MK-155/TCC (NSN 6625-00-603-9523)

**Headquarters, Department of the Army, Washington, DC**
**4 October 1977**

**REPORTING OF ERRORS**

You can help improve this publication by calling attention to errors and by recommending improvements and stating your reasons for the recommendations. Your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) should be mailed directly to Commander, US Army Electronics Command ATTN: DRSEL-MA-Q, Ft Monmouth, NJ 07703. A reply will be furnished directly to you.


| | | Paragraph | Page |
|---|---|---|---|
| SECTION I | IDENTIFICATION AND DESCRIPTION | | |
| | Test instrument identification | 1 | 2 |
| | Calibration data card | 2 | 2 |
| | Calibration description | 3 | 2 |
| II | EQUIPMENT REQUIREMENTS | | |
| | Equipment required | 4 | 3 |
| | Accessories required | 5 | 3 |
| | Additional equipment required | 6 | 3 |
| III | CALIBRATION PROCESS | | |
| | Preliminary procedure | 7 | 4 |
| | Measuring set accuracy | 8 | 5 |
| | Matching transformer set, resistor accuracy | 9 | 5 |
| | Unassembled parts, resistor accuracy | 10 | 5 |
| | Final procedure | 11 | 5 |


*This technical bulletin supersedes TB 11-6625-238-35/1,17 November 1967.

## Section I. IDENTIFICATION AND DESCRIPTION

**1. Test Instrument Identification.** a. This bulletin provides instructions for the calibration of Telephone Carrier System Test Facilities Kit MK-155/TCC (fig. 1) The equipment being calibrated will he referred to as the "Test Instrument" throughout this bulletin.

b. The time required to perform this calibration is approximately 2 hours, using a dc low frequency technique.

**2. Calibration Data Card.** Calibration Data Card (DA Form 2416) will be annotated in accordance with instructions given in TM38-750 for this calibration. There are no adjustments on the Test Instrument. Deteriorating parts of this maintenance kit must be replaced when an out of tolerance condition is detected.

**3. Calibration Description.** Test Instrument parameters and performance specifications are listed in table 1.

Table 1 Calibration Description

| Measuring Set | |
|---|---|
| **Test instrument parameters** | **Performance specifications** |
| Power source | 200 vdc, 6.3 vac |
| Range | −6.0 to +6 dB |
| Accuracy | ±0.3 dB per step, except increasing to ±0.8 at ±6 dB. |
| Frequency sensitivity | 1000 Hz to 200 kHz. |
| Meter movement* | 500 microamperes dc |
| Input impedance* | 54,000 ohms |
| **Matching Transformer Set** | |
| Resistor accuracy | ±1% and ±5% |
| **Unassembled Parts** | |
| Resistor accuracy | ±1% and ±5% |

*Not verified in this procedure.

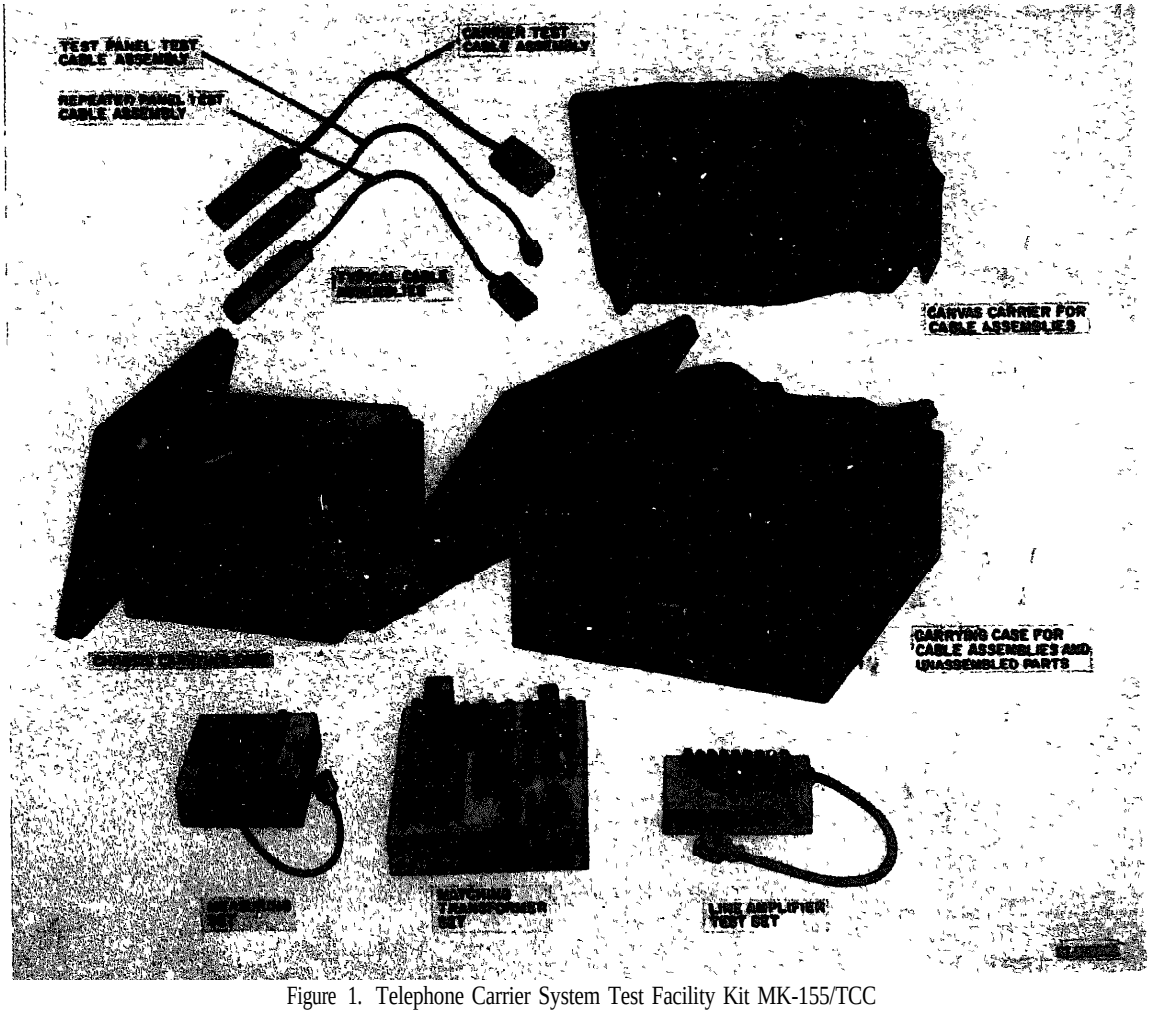


Figure 1. Telephone Carrier System Test Facility Kit MK-155/TCC