

SIGNAL CORPS
REPAIR STANDARD

Amendment 1, 6 July 1954

NO. REP-440
ISSUE NO. 1

REPAIRED EQUIPMENT STANDARD
FOR
TELEPHONE TP-3

PROJECT 4422D

26 FEBRUARY 1953



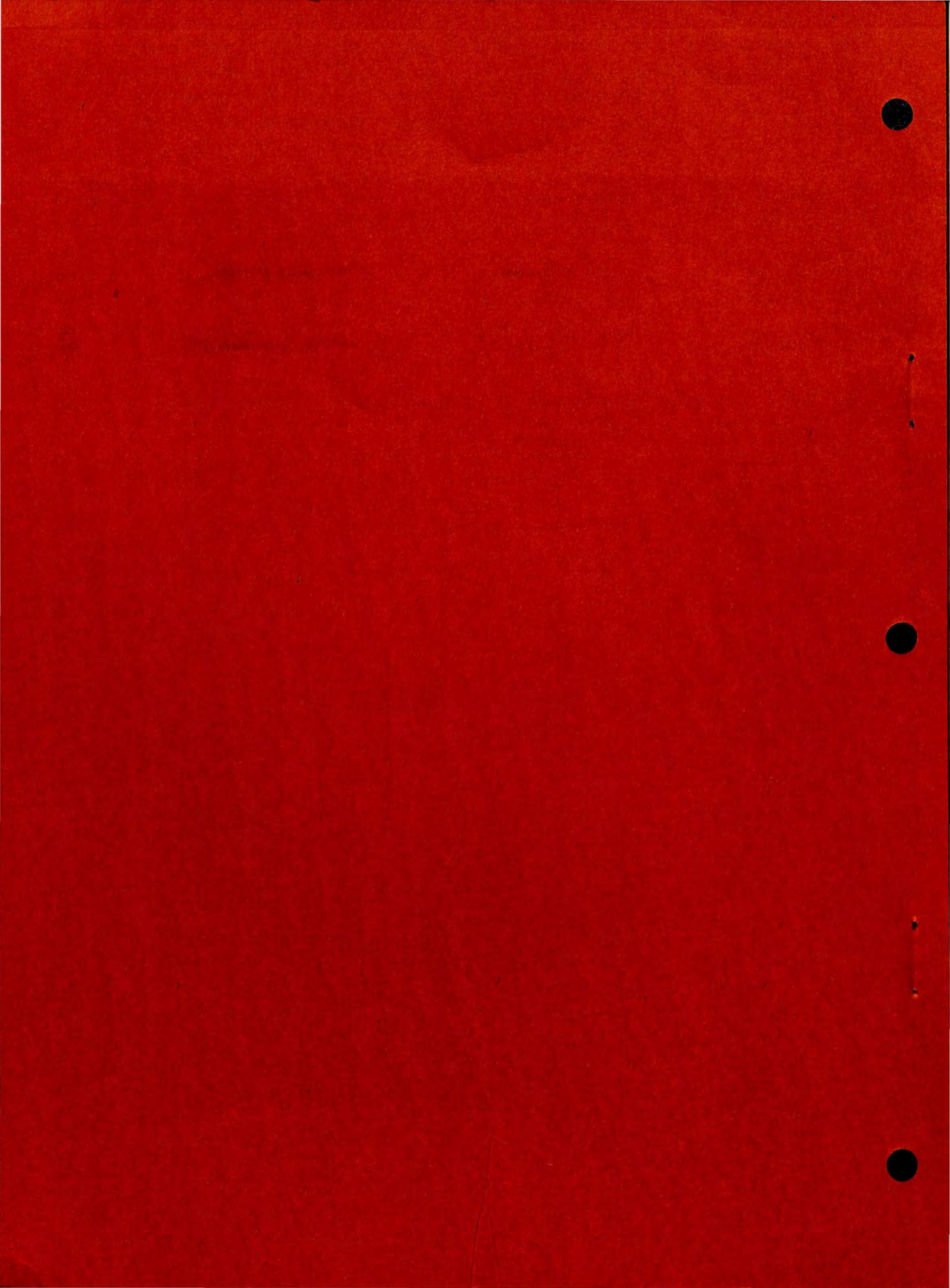
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FOR
TELEPHONE TP-3

1. Table 1, page 4. Under the column headed "Test Clip Connections", opposite Receiving Efficiency and Transmitting Efficiency, add: "See note." At the bottom of page 4, add the following note: Terminals L1 and L2 of Telephone TP-3 shall be connected to RECEIVER and COMMON terminals of Test Set I-142 for this test.

2. Table 1, page 5. Under the column headed "Reading Col. 2," opposite Receiving Efficiency and Transmitting Efficiency, change -3db to -7db and -7db to -3db.

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PREFACE

Signal Corps Repair Standards (formerly Signal Corps Repaired Equipment Requirements) are prepared by the Maintenance Engineering Branch, Procurement-Maintenance Engineering Division, Signal Corps Engineering Laboratories, and cover various items of signal equipments which are subject to repair, test and inspection. These repair standards are documents which set forth the specific repair requirements and test standards to be applied to the individual equipments being repaired and tested.

Signal Corps Repair Standards are prepared for the specific use of the fifth echelon Signal Repair Shops in repairing and determining the quality and acceptability of repaired signal equipments covered by these standards. The use of Signal Corps Repair Standards is recommended as a guide and reference for any agency having occasion to repair, test or inspect an item of signal equipment for which a repair standard has been prepared.

Signal Corps Repair Standard No. REP-1001 is a general standard and is subsidiary to any individual standard prepared. No individual standard is to be considered complete in itself, but is to be used in conjunction with Signal Corps Repair Standard No. REP-1001, "General Standards for Repaired Signal Equipment."

Reports of any discrepancies or any constructive comments bearing upon this repair standard are invited. A series of Comments and/or Notes pages will be found in the back of this standard which are designed to facilitate reporting any inaccuracies noted. All such reports or comments as well as requests for additional copies, should be addressed to:

COMMANDING GENERAL
Signal Corps Engineering Laboratories, SIGEL-PMM-3
Fort Monmouth, New Jersey.

REPAIRED EQUIPMENT STANDARD
FOR
TELEPHONE TP-3

I. STATEMENT COVERING APPLICABILITY

This repair standard covers inspection requirements to be used in determining the quality and acceptability of repaired Telephone TP-3. Its use is mandatory in the Maintenance Divisions of Signal Depots and the Signal Sections of General Depots. The use, insofar as limitations of test and calibration equipment permit, is highly recommended for all Signal Repair organizations.

A. Safety Precautions

1. Exercise Safety Precautions at all times.
2. Select and apply the proper tools.
3. Avoid makeshift methods.
4. Don't do damage to yourself or to the equipment.
5. BE CAREFUL

II. APPLICABLE REFERENCES

A. Repair Standards. Applicable paragraphs of the repair standards listed below form a part of this standard:

	Title	Number
1.	General Standards for Repaired Signal Equipment	REP-1001
2.	Hand Generators (Telephone)	REP-59

B. Technical Publications. The following technical publications form a part of this standard to the extent referenced herein:

Title	Number
1. Telephone TP-3	TM-11-2043
2. Test Set I-142	TM-11-2062

III. TEST EQUIPMENT

The following test equipment, or suitable equivalents of known accuracy, will be employed in determining compliance with the requirements of this Signal Corps Repair Standard and will be capable of conforming to their respective Repair Standards.

Equipment	Stock Number	Number Used	REP
Test Set I-142	3F4142	1	172

IV. REQUIREMENTS

A. General

1. Telephone TP-3 shall meet the applicable requirements of REP-1001, General Standards for Repaired Signal Equipment.

2. Generator GN-38 shall meet the mechanical and electrical requirements of REP-59, Signal Corps Repaired Equipment Requirements for Hand Generators (Telephone).

B. Mechanical Requirements

1. Ringer MC-131 shall meet the following mechanical requirements:

a. The armature assembly shall move without binding.

b. The clapper rod shall be at right angles to armature and the clapper, and shall clear each gong by approximately 1/64 inch. The gong lugs shall be approximately parallel and spaced 7/16 inch apart.

C. Electrical Requirements

1. Telephone TP-3 shall meet the requirements shown in the following table when tested with Test Set I-142 or I-142-A. Switches and dials of the test set for which settings are not shown shall remain in the unoperated position.

TABLE I - Telephone TP - 3

	Switch On Tele- phone TP-3	Test Clip Connections		Dial Control Settings			Equal- izer
		Black	Red	D2	D4	D5	
Generator (hand- set disconnected)	Gen handle pressed in	L1	L2	-	-	1	-
Ringer (handset disconnected)	Bell	L1	L2	-	-	1	-
Neon Lamp (hand- set disconnected)	Lamp	L1	L2	-	-	1	-
Capacitor CA-209 (handset discon- nected)	Bell	L1	L2	-	-	1	-
Capacitor CA-177-A (handset discon- nected)	Lamp	L1	BL-BLK term of term block	-	-	1	-
Insulation Resistance (handset connected)	-	stay cord screw or cord clamp	L2	-	-	1	-
Insulation Resistance	Bell	stay cord screw or cord clamp	L1	-	-	1	-
Receiving Efficiency	-	-	-	6	4	1	out
Transmitting Efficiency	-	-	-	6	4	1	out

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TABLE I - Telephone TP-3 (Cont'd.)

	Keys (switches)							Reading	
	2	4	5	6	7	8	9	L - Left of Col 2	R - Right of Col 2
								Col. 1	Col. 2
Generator (handset disconnected)	-	Gen	-	Ckt	AC	-	-	R	0. db
Ringer (handset disconnected)	-	Ring- er	-	Ckt	AC	-	-	-	Audible Ring at 0. db
Neon Lamp (handset disconnected)	-	Ring- er	-	Ckt	AC	-	-	-	Neon lamp on TP-3 lights at 0-db
Capacitor CA-209 (handset disconnected)	-	-	-	Cond	AC	-	-	-	Lamp LP 2 flashes at 3 sec in- tervals
Capacitor CA-177-A (handset disconnected)	-	-	-	Cond	AC	-	-	-	Lamp LP 2 flashes at 1 second interval
Insulation Resistance (handset connected)	-	-	BKDN	Ckt	AC	-	-	L	-6 db
Insulation Resistance	-	-	BKDN	Ckt	AC	-	-	L	-6 db
Receiving Efficiency	RCT	-	-	-	AC	REC	OPR	R	-3 db
Transmitting Efficiency	RCT	-	-	-	AC	REC	OPR	R	-7 db

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