

TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

TEST SET, RADIO TS-1588/AIC

(NSN 6625-00-895-6646)

AND

TEST SET, RADIO TS -1588A/AIC

(NSN6625-00-239-6010)

TECHNICAL MANUAL

No. 11-6625-441-34

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 8 January 1975

Direct Support and General Support Maintenance Manual

TEST SET, RADIO TS-1588/AIC (NSN 6625-00-895-6646)

AND TEST SET, RADIO TS-1588A/AIC

(NSN 6625-00-239-6010)

		Paragraph	Page
CHAPTER	1. INTRODUCTION		
Section	I. General		
	Scope	1-1	1-1
	Indexes of publications	1-2	1-1
	Reporting of errors	1-3	1-1
	II. Description and data		
	Description	1-4	1-1
	Tabulated data	1-5	1-1
	2. FUNCTIONING		
	Application, block diagram analysis	2-1	2-1
	Receiving test circuit functioning.	2-2	2-1
	Transmission test circuit functioning	2-3	2-3
	Self-test circuit functioning	2-4	2-6
	3. DIRECT SUPPORT MAINTENANCE		
	I. General		
	General instructions	3-1	3-1
	Organization of troubleshooting procedures.	3-2	3-1
	Tools and test equipment required	3-3	3-1
	II. Troubleshooting		
	Voltage and resistance measurements	3-4	3-1
	Troubleshooting of interphone test set	3-5	3-2
	III. Maintenance of Test Set, Radio TS-1588(*)/AIC		
	General	3-6	3-8
	Repair of hinges and replacement of hinges, latches, and handles	3-7	3-8
	Removal and replacement of switches	3-8	3-9
	Removal and replacement of relay K1	3-9	3-9
	Removal and replacement of lampholders	3-10	3-9
	Removal and replacement of fuseholders	3-11	3-9
	Removal and replacement of terminal boards	3-12	3-10
	Direct support test procedures.	3-13	3-10
	4. GENERAL SUPPORT MAINTENANCE AND TEST PROCEDURES		
	General	4-1	4-1
	Tools and test equipment required for general support	4-2	4-1
	Physical tests and inspections.	4-3	4-1
	Resistance Check	4-4	4-3
	Electrical tests	4-5	4-5
APPENDIX	REFERENCES		A-1

*This manual supersedes TM 11-6625-441-35, 19 October 1961, including all changes.

LIST OF ILLUSTRATIONS

Figure No.	Title	Page
2-1.	Interphone test set application, block diagram	2-1
2-2.	Interphone test set, receiving test set circuit, simplified schematic diagram	2-3
2-3.	Interphone test set, transmission test circuits, simplified schematic diagram	2-5
3-1.	Test Set, Radio TS-1588/AIC, upper front panel, parts location .	3-4
3-2.	Test Set, Radio TS-1588/AIC, lower front panel, parts location	3-5
3-3.	Test Set, Radio TS-1588A/AIC, upper front panel, parts location .	3-7
3-4.	Test Set, Radio TS-1588A/AIC, lower front panel, parts location	3-8
4-1.	Test Set, Radio TS-1588(*)/AIC resistance check connection diagram	4-5
4-2.	Test Set, Radio TS-1588(*)/AIC electrical test connection diagram . .	4-7
FO-1.	Color code marking for MIL-STD resistors, inductors, and capacitors	In back of manual
FO-2.	Test Set, Radio TS-1588(*)/AIC, self-test circuits simplified schematic diagram	In back of manual
FO-3.	Test Set, Radio TS-1588(*)/AIC schematic diagram .	In back of manual
FO-4.	Test Set, Radio TS-1588(*)/AIC wiring diagram	In back of manual

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes and covers direct support and general support maintenance for Test Sets, Radio TS-1588/AIC and TS-1588A/AIC (interphone test set). Included are instructions appropriate to direct support and general support maintenance for troubleshooting, testing, repairing equipment, replacing parts and repairing specific parts. In addition, this manual provides a listing of tools, materials, and test equipment used by direct support and general support maintenance.

b. Official nomenclature and government type designation, including the symbol (*) is used to identify all models of the equipment covered by this manual; therefore, Test Set, Radio TS-1588(*)/AIC represents Test Sets, Radio TS-1588/AIC and TS-1588A/AIC.

c. The two basic configurations of Test Set, Radio TS-1588(*) /AIC are identical, except for the addition of an EMER position on RECEIVER SEL switch S4 and an ALTN position on TRANSMITTER SEL switch S5 and accompanying circuitry installed on Test Set, Radio TS-1588A/AIC. The EMER position of RECEIVER SEL switch S4 and the ALTN position of TRANSMITTER SEL switch S5 provide test and checkout capability for the emergency receiver audio input circuitry and the alternate transmitter number 1 audio output circuitry, respectively, of Control, Intercommunication Set C-1611(*)/AIC.

d. The complete manual for Test Set, Radio

TS-1588(*)/AIC includes TM 11-6625-441-12, TM 11-6625-441-20P, and TM 11-6625-441-34P. To better understand the functions of Test Set, Radio TS-1588(*)/AIC and its relation to Control, Intercommunication Set C-1611(*)/AIC, TM 11-5831-201-35 should be consulted and understood.

e. Throughout this manual, Test Set, Radio TS-1588(*)/AIC will be referred to as interphone test set, and Control, Intercommunication Set C-1611(*)/AIC will be referred to as interphone control.

NOTE

For applicable forms and records, refer to TM 11-6625-441-12.

1-2. Indexes of Publications

a. *DA Pam 310-4*. Refer to the latest issue of *DA Pam 310-4* to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. *DA Pam 310-7*. Refer to *DA Pam 310-7* to determine whether there are modification work orders (MWO'S) pertaining to the equipment.

1-3. Reporting of Errors

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-AC, Fort Monmouth, New Jersey 07703.

Section II. DESCRIPTION AND DATA

1-4. Description

Refer to TM 11-6625-441-12 for general description and illustrations which reflect this equipment.

1-5. Tabulated Data

Refer to TM 11-6625-441-12 for tabulated data covering this equipment.