# TM 11-6625-2414-15

**DEPARTMENT** 

**OF** 

THE

**ARMY** 

**TECHNICAL** 

**MANUAL** 

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE MANUAL

# TEST FACILITIES KIT MK-1191/AR

This copy is a reprint which includes current pages from changes 1 through 4.

TECHNICAL MANUAL

No. 11-6625-2414-15

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 17 October 1969

# Operator's, Organizational, Direct Support, and General Support Maintenance Manual TEST FACILITIES KIT MK-1191/AR (NSN 6625-00-179-2528)

#### REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, NJ 07703

In either case, a reply will be furnished direct to you.

			Paragraph	Page
CHAPTER	1.	INTRODUCTION		
SECTION	1.	General		
		Scope	1-1	1-1
		Consolidated Index of Army Publications and Blank Forms.	1-2	1-1
		Maintenance forms, records and reports	1-3	1-1
		Reporting equipment improvement recommendations (EIR)	1-3.1	1-1
	II.	Hand receipt (-HR) manual  Description and Data	1-3.2	1-1
		Purpose and use	1-4	1-3
		Technical characteristics	1-5	1-4
		Lis tof components	1-6	1-4
		Description of equipment	1-7	1-7
		Description of transit case and rninor components	1-8	1-7
CHAPTER		INSTALLATION AND OPERATING INSTRUCTIONS		
SECTION	I.	Service Upon Receipt of Equipment		
		Unpacking	2-1	2-1
		Checking unpacked equipment	2-2	2-1
		Installation	2-3	2-1
	т	Component utilization	2-4	2-1
	1.	Operating Instructions	2.5	2.5
		Operation-crimping tool, MS319-1	2-5	2-5
		O peration rimping tool 612118	2-6	2-5
		Operation-support and drill fixture		2-6
		Operation-backlash fixture	2-8	2-8
CHAPTER		MAINTENANCE		
SECTION	I.	General		
		Scope of maintenance	3-1	3-1
		Tools and materials required	3-2	3-1
		Preventive maintenance checks and services periods	3-3	3-1
	II.	Maintenance Procedures		
		Daily preventive maintenance checks and services chart	3-4	3-1
		Monthly preventive maintenance checks and services chart	3-5	3-1
		Cleaning	3-6	3-2

				Paragraph	Page			
		Touchup painting instru	ction		3-2			
	III.	11			3-2			
				3-9	3-2			
		Troubleshooting		3-10	3-2			
		Repairs		3-11	3-3			
			es/terminations		3-3			
CHAPTER	4.	SHIPMENT, LIMITE	D STORAGE, AND DEMOLITION					
		OF MATERIEL TO PREVENT ENEMY USE						
SECTION	I.	Shipment and Limited	Storage					
		Disassembly of equipme	ent		4-1			
		Packaging for shipment		. 4-2	4-1			
	II.	Demolition of Materie	to Prevent Enemy Use					
		•	1		4-1			
		Methods of destruction		4-4	4-1			
APPENDIX					A-1			
		B. DELETED						
	C.	MAINTENANCE ALLO	CATION		C-l			
			LIST OF ILLUSTRATIONS					
	F	ig. No.	Title					
		1-1	Test Facilities Kit MK-1191/AR, bottom.					
		1-2	Test Facilities Kit MW-1191/AR, top.					
		1-3	Test Facilities Kit MK-1191/AR, extender cards.					
		1-4 ①	Test Facilities Kit MK-1191/AR, extender cables (part 1 of 2).					
		1-4 ②	Test Facilities Kit MK-1191/AR, extender cables (part 2 of 2).					
		1-5	Test Facilities Kit MK-1191/AR, breakout boxes.					
		1-6 ①	Test Facilities Kit MK-1191/AR, adapters (part 1 of 2).					
		1-6 ②	Test Facilities Kit MK-1191/AR, adapters (part 2 of 2).					
		1-7	Test Facilities Kit MK-1191/AR, special tools (common usage).					
		1-8 ①	Test Facilities Kit MK-1191/AR, special tools (part 1 of 4).					
		l-8 ②	Test Facilities Kit MK-1191/AR, special tools (part 2 of 4).					

Test Facilities Kit MK-1191/AR, special tools (part 3 of 4).

Test Facilities Kit MK-1191/AR, special tools (part 4 of 4). Test Facilities Kit MK-1191/AR, special tools (part 5 of 5).

AN/ARC-116 tuning control assembly mounted in backlash fixture.

Power supply termination (AN/ARC-114), schematic diagram.

Power supply termination (AN/ARC-115), schematic diagram.

Power supply termination (AN/ARC-116), schematic diagram.

Breakout box (AN/ARC-114), schematic diagram (part 1 of 8).

Breakout box (AN/ARC-114), schematic diagram (part 2 of 8).

Breakout box (AN/ARC-114), schematic diagram (part 3 of 8).

Breakout box (AN/ARC-114), schematic diagram (part 4 of 8). Breakout box (AN/ARC-114), schematic diagram (part 5 of 8).

Breakout box (AN/ARC-114), schematic diagram (part 6 of 8). Breakout box (AN/ARC-114) schematic diagram (part 7 of 8).

Breakout box (AN/ARC-114), schematic diagram (part 8 of 8).

Breakout box (AN/ARC-115), schematic diagram (part 1 of 5). Breakout box (AN/ARC-115), schematic diagram (part 2 of 5).

Breakout box (AN/ARC-115), schematic diagram (part 3 of 5). Breakout box (AN/ARC-115), schematic diagram (part 4 of 5).

Breakout box (AN/ARC-115), schematic diagram (part 5 of 5). Breakout box (AN/ARC-116), schematic diagram (part 1 of 8).

Breakout box (AN/ARC-116), schematic diagram (part 2 of 8).

Breakout box (AN/ARC-116), schematic diagram (part 3 of 8).

Assembly instructions for type BNC RF cable connectors.

AN/ARC-l16 tuning control assembly mounted in support and drill fixture with top plate removed.

AN/ARC-116 tuning control assembly mounted in support and drill fixture with top plate attached.

Packaging of maintenance accessories kit.

Headset termination, schematic diagram. Microphone termination, schematic diagram.

Headset adapter cable, schematic diagram.

Assembly instructions for RF cable connector.

Backlash fixture, rear oblique view.

1-8 ③

1-8 4

1-8 ⑤ 2-1

2-2 2-3

2-4

2-5

3\_1

3-2 3-3

3-4

3-5

3-6 3-7

3-8 3-9 ①

3-9 ②

3-9 ③

3-9 (4)

3-9 **⑤** 3-9 **⑥** 

3-9 ⑦ 3-9 ⑧

3-10 ①

3-10 ② 3-10 ③

3-10 **④** 3-10 **⑤** 

3-11 ① 3-11 ②

#### LIST OF ILLUSTRATIONS—Continued

Fig. No.	Title
3-11 ④	Breakout box (AN/ARC-l 16), schematic diagram (part 4 of 8).
3-11 ⑤	Breakout box (AN/ARC-l 16), schematic diagram (part 5 of 8).
3-11 ⑥	Breakout box (AN/ARC-l 16), schematic diagram (part 6 of 8).
3-11 ⑦	Breakout box (AN/ARC-1 16), schematic diagram (part 7 of 8).
3-11 ®	Breakout box (AN/ARC-1 16), schematic diagram (part 8 of 8).
3-12	Breakout box (AN/ARN-89), schematic diagram.
3-13	Power supply termination boxes, interior view.
3-14	Breakout box (AN/ARC- 114) interior view.
3-15	Breakout box (AN/ARC-115), interior view.
3-16	Breakout box (AN/ARC-116), interior view.
3-17	Breakout box (AN/ARN-89), interior view.

# CHAPTER 1 INTRODUCTION

#### **Section 1. GENERAL**

#### 1-1. Scope

a. This manual describes Test Facilities Kit MK-1191/AR (fig. 1-1, 1-2) and provides instructions for installation, operation and maintenance. Included are instructions for use under usual conditions, cleaning and inspection of the equipment, and replacement of parts available to the operator and organizational repairmen.

- b. Three appendices are included in this manual
  - (1) Appendix A, References.
  - (2) Appendix B, Basic issue items list.
  - (3) Appendix C, Maintenance allocation chart.

### 1-2. Consolidated Index of Army Publications and Blank Forms

Refer to the latest issue of DA Pam 310-1 to determine whether there are new editions, changes or additional publications pertaining to the equipment.

## 1-3. Maintenance Forms, Records, and Reports

a. Report of Maintenance and Unsatisfactory Equipment. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, the Army Maintenance Management System (TAMMS).

b. Report of Packaging and Handling Deficiencies. Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73/AFR400.54/MCO4430.E.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33 B/AFR 75-18/MCO P4610.19C/DLAR4500.15.

## 1-3.1. Reporting Equipment Improvement Recommendations (EIR)

If your MK-1191/AR needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, NJ 07703. We'll send you a reply.

#### 1-3.2. Hand Receipt (-HR) Manuals

This manual has a companion document with a TM number followed by "-HI" (which stands for Hand Receipt). The TM 11-6625 -2414-10-HR consists of preprinted hand receipts (DA Form 2062) that list end item related equipment (i.e., COEI, BII, and AAL) you must account for. As an aid to property accountability, additional -HR manuals maybe requisitioned from The US Army Adjutant General Publications Center in Baltimore, MD, in accordance with the procedures in Chapter 3, AR 310-2, and DA Pam 310-10-2.

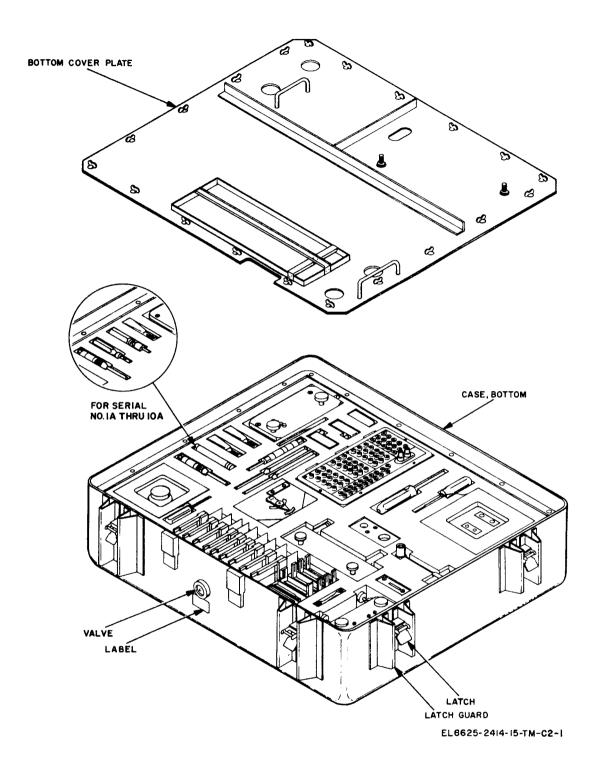


Figure 1-1. Test Facilities Kit MK-1191/AR, bottom.