

**TM 11-6625-2611-12**

---

**TECHNICAL MANUAL**

**OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL  
TEST SET, TRANSPONDER SET  
AN/APM-305A**

---

**HEADQUARTERS, DEPARTMENT OF THE ARMY**

**JUNE 1978**

**OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL  
 TEST SET, TRANSPONDER SET AN/APM-305A**

**REPORTING OF ERRORS**

**You can improve this manual by recommending improvements using DA Form 2028-2 (Test) located in the back of the manual. Simply tear out the self-addressed form, fill it out as shown on the sample, fold it where shown, and drop it in the mail.**

**If there are no blank DA Form 2028-2 (Test) in the back of your manual, use the standard DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forward to the Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN DRSEL-MA-Q, Fort Monmouth, NJ, 07703.**

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

CHAPTER	Section		Paragraph	Page
	1.	INTRODUCTION		
	I.	General		
		Scope .....	1-1	1-1
		Indexes of Publications .....	1-2	1-3
		Forms and Records .....	1-3	1-3
		Administrative Storage .....	1-4	1-3
		Destruction of Army Electronics Matinal... ..	1-5	1-3
		Calibration .....	1-6	1-3
		Reporting Equipment Improvement Recommendations .....	1-7	1-3
	II.	Description and Data		
		Purpose and Use .....	1-8	1-3
		Description .....	1-9	1-3
		Tabulated Data .....	1-10	1-4
		Items Comprising and Operable Equipment. ....	1-11	1-5
CHAPTER	2.	SERVICE UPON RECEIPT AND INSTALLATION		
Section	I.	Semite Upon Receipt of Materiel Siting .....	2-1	2-1
		Unpacking .....	2-2	2-1
		Checking Unpacked Equipment .....	2-3	2-2
	II.	Installation Instructions Tools, Test Equipment, and Materials Required for Installation .....	2-4	2-3
		Assembly of Equipment .....	2-5	2-3
		Installation procedures .....	2-6	2-3
		Interconnections .....	2-7	2-3
	III.	Preliminary Adjustment of Equipment		
		Operator's Controls, Indicators, and Connectors .....	2-8	2-3
		Typical Bench Setup .....	2-9	2-3
		Additional Test Capabilities .....	2-10	2-5
	IV.	Circuit Alignment		
		Introduction .....	2-11	2-5
		General Information .....	2-12	2-5
CHAPTER	3.	OPERATING INSTRUCTIONS		
Section	I.	Controls and Instruments		
		Damage From Improper Settings .....	3-1	3-1
		Operator's Controls .....	3-2	3-1
	II.	Operation Under Unusual Conditions and Preparation for Movement		
		preliminary Starting Procedure .....	3-3	3-3
		procedure for Shutdown .....	3-4	3-3
		Preparation for Movement .....	3-5	3-3
CHAPTER	4.	OPERATOR/CREW MAINTENANCE INSTRUCTIONS		
		Tools and Equipment .....	4-1	4-1
		Lubrication .....	4-2	4-1
		Preventive Maintenance Checks and Services .....	4-3	4-1

	Paragraph	Page
CHAPTER 4 (cont.) Preventive Maintenance . . . . .	4-4	4-1
Preventive Maintenance and Service Periods . . . . .	4-5	4-1
Daily Preventive Maintenance Checks and Service Periods . . . . .	4-6	4-1
Weekly Preventive Maintenance Checks and Services . . . . .	4-7	4-1
Quarterly Preventive Maintenance Checks and Services . . . . .	4-8	4-2
Quarterly Test Procedure . . . . .	4-9	4-2
General Troubleshooting Information . . . . .	4-10	4-5
Troubleshooting Chart . . . . .	4-11	4-12
CHAPTER 5 . ORGANIZATIONAL MAINTENANCE INSTRUCTIONS		
General . . . . .	5-1	5-1
Cleaning . . . . .	5-2	5-1
Touchup Painting Instructions . . . . .	5-3	5-1
Replacement of POWER Indicator Lamp . . . . .	5-4	5-1
Replacement of POWER DC FAULT Indicator Lamp . . . . .	5-5	5-1
Replacement of fuse . . . . .	5-6	5-1
Minor Repair of Cables . . . . .	5-7	5-1
CHAL AUX MOD DLY Knob Adjustment . . . . .	5-8	5-1
Knob Replacement . . . . .	5-9	5-2
APPENDIX A . REFERENCES . . . . .		A-1
B. COMPONENTS OF END ITEM LIST . . . . .		
Section I. Introduction . . . . .		B-1
Section II. Integral Components of End Item . . . . .		B-2
APPENDIX C . ADDITIONAL AUTHORIZATION LIST (Not applicable)		
APPENDIX D . MAINTENANCE ALLOCATION		
Section I. Introduction . . . . .		D-1
Section II. Maintenance Allocation Chart for TEST SET, TRANSPONDER SET AN/APM-305A . . . . .		D-3
Section III. Tool and Test Equipment Requirements for Transponder Set, Test Set AN/APM-305A . . . . .		D-5
APPENDIX E . EXPENDABLE SUPPLIES AND MATERIALS LIST		
Section I. Introduction . . . . .		E-1
Section II. Expendable Supplies and Materials List . . . . .		E-2

# CHAPTER 1 INTRODUCTION

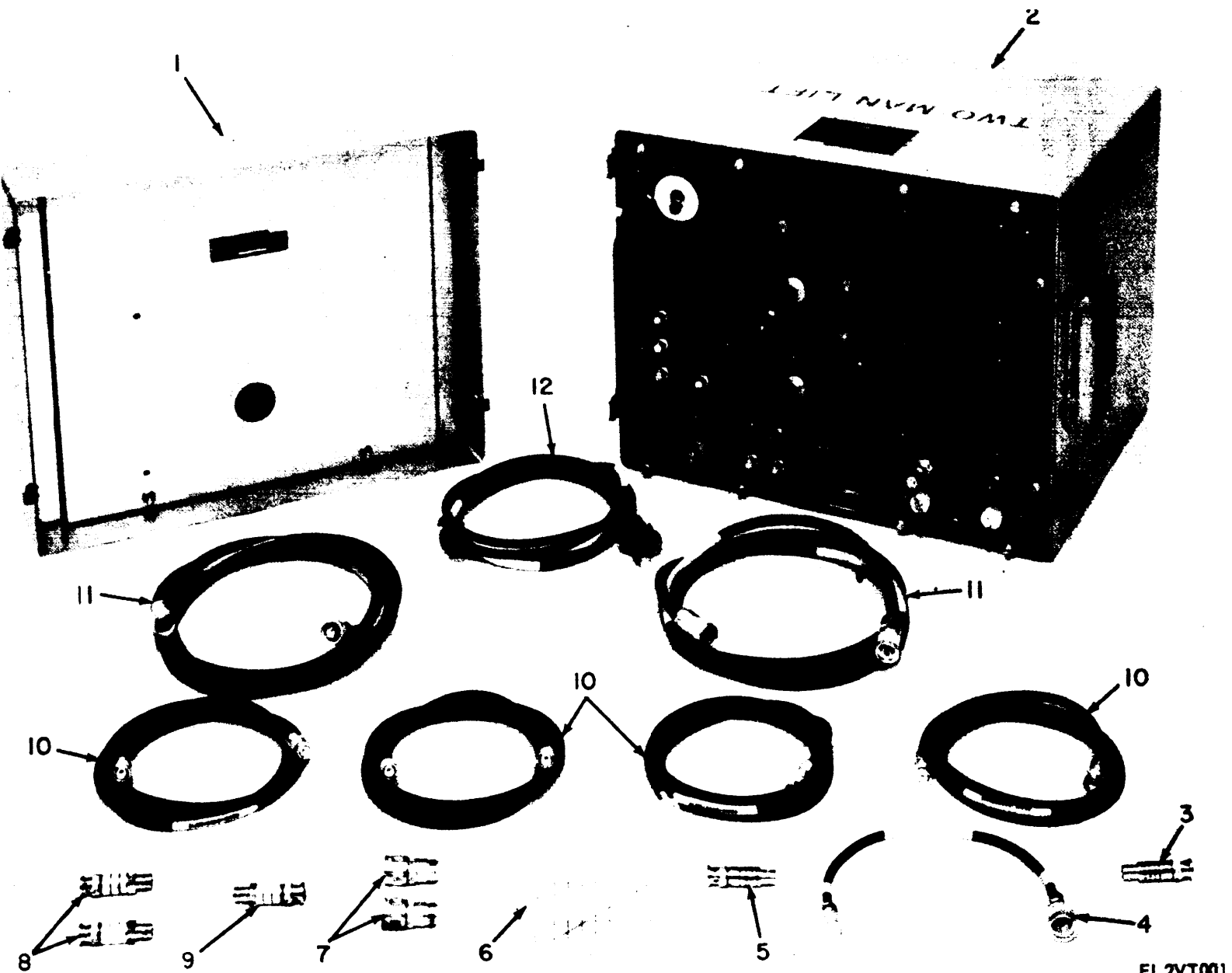
---

## Section I. GENERAL

### 1-1. Scope

This manual describes Test Set, Transponder Set AN/APM-305A (test set) (fig. 1-1) and covers its operation and organizational maintenance. It includes in-

structions for installation, operation, inspection, self-testing, and preventive maintenance of the equipment. Also included in this manual is a maintenance allocation chart (app D).



EL2VT001

Figure 1-1. Test Set, Transponder Set ANIAPM-305A

- 1 Cover Assy Test Set MX-9944/APM305A (152050)
- 2 Test Set Transponder TS-3395 A/APM305 (152100)
- 3 Attenuator, 30 dB (134645-2)
- 4 Cable Assy, RF (Jumper) (139528)
- 5 Attenuator, 15 dB (134645-1)
- 6 Chart, Conversion RF (151944-1)

- 7 Adapter C (male) to N (female) (UG-565 A/U)
- 8 Termination, Feedthru, 75 ohm (134646-1)
- 9 Termination, Feedthru, 93 ohm (134646-2)
- 10 Cable Assy, Video (139527)
- 11 Cable Assy, RF (139526)
- 12 Cable Assy, Power, AC (139529)