TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL AND DIRECT SUPPORT MAINTENANCE MANUAL AIL BROADBAND AMPLIFIER, MODEL 10512

HEADQUARTERS, DEPARTMENT OF THE ARMY
5 MARCH 1985

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HEADQUARTERS
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OPERATOR'S, ORGANIZATIONAL AND DIRECT SUPPORT MAINTENANCE MANUAL

AIL BROADBAND AMPLIFIER, MODEL 10512

REPORTING ERRORS AND RECOMMENDING IMPROVEMIENTS

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, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-MIE-MP, Fort Monmouth, NJ 07703-5007. In either case, a reply will be sent direct to you.

Copies of this manual may be procured from Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-PEW, Fort Monmouth, NJ 07703-5007.

1. Scope

a. This manual, together with the manufacturer's publication titled: AIL Broadband Amplifier, Model 10512, which has been authenticated as TM 11-6625- 3070-13-2, provides for complete operator's, organiza-tional and direct support maintenance coverage of AIL Broadband Amplifier, Model 10512.

b. This manual includes:

(1) References (appx A).

(2) Components of End Item List (COEIL) (appx B).

(3) Maintenance Allocation Chart (MAC) (appx D).

c. Repair parts and special tools list are included in TM 11-6625-3070-24P.

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.

3. Maintenance Forms, Records, and Reports

a Reports of Maintenance and and Unsatisfactory Equipment. Department of the Arm) forms and procedures used for equipment maintenance will be those prescribed b) DA Pam 738-750, as contained ill Maintenance Management Update.

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/NANVMATINST 4355.73A/AFR 400-54 /MCO 4430.3F.

c. Discrepancy in Shipment Report (DISREP) (SF361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38 NAVSUPINST 4610.33C/AFR75-18/MCOP4610.19D/DLAR 4500.15.

4. Reporting Equipment Improvement Recommendations (EIR)

If your equipment needs improvement, let us know. Send us an EIR. You, the user, are the only one 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-M\fs18 P, Fort Monmouth, New Jersey 07703-5007. We'll send you a reply.

5. Administrative Storage

Administrative storage of equipment issued to and used b) .activities will have preventive maintenance performed in accordance with the PMCS charts before storing. When removing the equipment from administrative storage the PMCS should be performed to assure operational readiness.

6. Destruction of Army Electronics Materiel

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

APPENDIX A
REFERENCES

DA Pam 310-1	Consolidated Index of Army Publications and Blank forms.
DA Pam 738-750	The Army Maintenance Management System (TAMMS).
*TM 11-6625-3070-13-2	Operator's, Organizational and Direct Support Maintenance Manual for AIL. Broadband Amplifier, Model 10512.
*TM 11-6625-3070-24P Special	Organizational, Direct Support and General Support Maintenance Repair Parts and Tools Lists for AIL Broadband Amplifiers, Model 10512.
TM 740-90-1	Administrative Storage of Equipment.
T750-244-2	Procedures for Destruction of Electronics Materiel to Prevent Enemy Use (Electronics Command).

***Not stocked by the Army Publication Center. Copies may be obtained from Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-PEW, Fort Monmouth, New Jersey 07703-5007.**

APPENDIX B
COMPONENTS OF END ITEM LIST

Section I. INTRODUCTION

B-1. Scope

This appendix lists integral components of and basic issue items for .AlL Broadband ;, Model 10512 to help you inventory items required for safe and efficient operation.

B-2. General

This Components of End Item List is divided into the following sections:

a. Section II. Integral Components of the End Item. These items, when assembled, comprise the AIL. Broadband Amplifier and must accompany it whenever it is transferred or turned in. The illustrations will help identify these items.

b. Sec tion III. Basic Issue Items Not applicable.

B-3. Explanation of Columns

a. Illustration. This column is divided as follows:

(1) Figure number. Indicates the figure number of the illustration on which the item is shown.

(2) Item Number. The number used to identify item called out in the illustration.

b. National Stock Number. Indicates the National Stock number assigned to the item and which will be used for requisitioning.

c. Part Number. Indicates the primary number used by the manufacturer, which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items. Following the part number, the Federal Supply Code for manufacturers (FSCM) is shown in parenthesis.

d. Description. Indicates the Federal item name and if required, a minimum description to identify the item.

c. Location. The physical location of each item listed is given in this column. The lists are designed to inventory all items in one area of the major item before moving on to an adjacent area.

f. Usable Code. Not Applicable.

g. Quantity Required (Qty. Reqd.). This column lists the quantity of each item required for a complete major item.

h. Quantity. This column is left blank for use during an inventory. Under the rcvd column, list the quantity you actually receive on your major item. The Date columns are for your use when you inventory the major item on a later date; such as for shipment to another site.

Section II. INTEGRAL COMPONENTS OF END ITEM

BROADBAND AMPLIFIER. AIL MODEL 10512

(1) ILLUSTRATION (A) FIG.	(1) ILLUSTRATION (B) ITEM	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION PART NUMBER CAGE	(4) LOCATION	(5) USUABLE ON CODE	(6) QTY REQD	(7) QUANTITY RCVD	(7) QUANTITY DATE
			BROADBAND AMPLIFIER, AIL MODEL 10512					

APPENDIX D
MAINTENANCE ALLOCATION

Section I. INTRODUCTION

D-1. General

This appendix provides a summary of the maintenance operation for SIL Broadband Amplifier, Model 10512. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

D-2. Maintenance Function

Maintenance functions will be limited to and defined as follows:

a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination.

b. Test. To verify serviceability and to detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service/ Operations required periodically to keep an item in proper operating condition, i.e., to clean(decontaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulics fluids, or compressed air supplies.

d. Adjust. To maintain within prescribed limits, by bringing into proper or exact position or by setting the operating characteristics to the specified parameters.

e. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test measuring or diagnostic equipments used in precision measurements. Consists of comparisons of two instruments, one which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

g. Install. The exact of emplacing, seating, or fixing into position an item, part, module (component or assembly) in a manner to allow the proper functioning of the equipment or system.

h. Replace. The act of substituting a serviceable like type part, subassembly, or module (component or assembly) for an unserviceable counterpart.

i. Repair. The application of maintenance services (inspect, test, service, adjust, align, calibrate, replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

j. Overhaul. That maintenance effort (service/action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (i.e., DMWR) in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance wit the original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours, miles, etc.) considered in classifying Army equipments/components.

D-3. Column Entries

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2, Component /Assembly. Column 2 contains the noun names of components, assemblies, subassemblies and modules for which maintenance is authorized.

c. Column 3, Maintenance Functions. Column 3 lists the functions to be performed on the item listed in column 2. When items are listed without maintenance functions, it is solely for purpose of having the group numbers in the MAC and RPSTL coincide.

d. Column 4, Maintenance Category. Column 4 specifies, by the listing of a “work time” figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to function listed in column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance categories, appropriate “work time” figures will be shown for each category. The number of task-hours specified by the “work-time” figure represents the average time requires to restore an item (assembly, subassembly, component, module, end item or system) to a serviceable condition under typical field operating conditions

This time includes preparation time, troubleshooting time, and quality assurance quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. Subcolumns of column 4 are as follows:

C-Operator/Crew
O-Organizational
F-Direct Support
H-General Support
D-Depot

e. Column 5. Tools and Equipment. Column 5 specifies by code, those common tool set (not individual tools) and special tools, tests, and support equipment required to perform the designated function.

f. Column 6, Remarks. Column 6 contains an alphabetic code which leads to the remark in Sec IV, Remarks which is pertinent to the item opposite the particular code.

D-4. Tool and Test Equipment Requirements (Sect. III)

a. Tool or Test Equipment Reference Code. The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The number indicate the applicable tool or test equipment for the maintenance functions.

b. Maintenance Category. The codes in this column indicate the maintenance category allocated the tool or test equipment.

c. Nomenclature. This column list the noun name and the nomenclature of the tools and test equipment required to perform the maintenance functions.

d. National NATO Stock Number. This column lists the national/NATO stock number of the specific tool or test equipment.

e. Tool Number. This column lists the manufacturer's part number of the tool followed by the Federal Supply code for manufacturers (5-digit) in parenthesis.

D-5. Remarks (Sect. IV)

a. Reference Code. This refers to the appropriate item in section II, column 6.

b. Remarks. This column provides the required explanatory information necessary to clarify items appearing in Section II.

Section II. MAINTENANCE ALLOCATION CHART
FOR
AIL BROAD BAND AMPLIFIER, MODEL 10512

(1) GROUP NUMBER	(2) COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY C	O	F	H	D	(5) TOOLS AND EQUIPMENT	(6) REMARKS
00	AIL BROADBAND AMPLIFIER MODEL 10512	Inspect		0.1					
		Test					0.5		
		Replace		0.2				1	
		Repair					4.0		
		Repair		1.0					A
01	COUPLER, B852-1136	Test					1.0		
		Replace			1.0				
		Repair					4.0		
02	AMPLIFIER, B852-1131-2	Test					1.0		
		Replace			1.0				
		Repair					4.0		

Section III. TOOL AND TEST EQUIPMENT REQUIREMENTS FOR

AIL BROADBAND AMPLIFIER, MODEL 10512

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOOL NUMBER
1	0	TOOL KIT, ELECTRONIC EQUIPMENT TK-105/G	5180-00-610-8177	

Section IV.REMARKS

REFERENCE CODE	REMARKS
A	REPAIR CONSIST OF REPLACEMENT OF THE SUBASSEMBLY.

By Order of the Secretary of the Army:

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Chief of Staff

Official:

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