

ORGANIZATIONAL MAINTENANCE MANUAL

INTRODUCTION

Page 1-1

PREVENTIVE  
MAINTENANCE

Page 2-1

TROUBLE  
SHOOTING

Page 2-4

MAINTENANCE  
ALLOCATION  
CHART

Page B-1

UNITED STATES DEPARTMENT OF THE ARMY

16 NOVEMBER 1982

## WARNINGS

- Before beginning any work on this equipment, review the general safety precautions and procedures in TB 385-4, Safety Precautions for Maintenance of Electrical and Electronic Equipment. Do not work on equipment alone. Be sure that a person capable of rendering first aid is present.
- To prevent personal injury when applying or removing steel strapping on crates or cartons, wear heavy gloves and protective eye glasses. Do not handle cartons by the steel straps.
- Adequate ventilation should be provided while using TRI CHLOROTRI FLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRI CHLOROTRI FLUOROETHANE dissolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician immediately.
- Compressed air shall not be used for cleaning purposes except where reduced to less than 29 pounds per square inch (psi) and then only with effective chip guarding and personnel protective equipment. Do not use compressed air to dry parts when TRI CHLOROTRI FLUOROETHANE has been used. Compressed air is dangerous and can cause serious bodily harm if protective means or methods are not observed to prevent chip or particle (of whatever size) from being blown into the eyes or unbroken skin of the operator or other personnel.
- Do not attempt to lift or move the heavy components of the AB-621(\*)/G or MK-2044/G without adequate personnel.

TECHNICAL MANUAL

No. 11-5985-334-20

\*TM 11-5985-334-20  
HEADQUARTERS  
DEPARTMENT OF THE ARMY

Washington, DC, 16 November 1982

ORGANIZATIONAL MAINTENANCE MANUAL

MAST AB-621/G  
(NSN 5985-00-782-5278)  
MAST AB-621A/G  
(NSN 5985-01-061-2828)  
EXTENSION KIT MK-2044/G  
(NSN 5985-01-119-2925)

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 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-ME-MP, Fort Monmouth, New Jersey 07703. A reply will be furnished to you.

\*This manual supersedes so much of TM 11-5985-334-15, 2 October 1971, as pertains to organizational maintenance.

	Paragraph	Page
HOW TO USE THIS MANUAL . . . . .		iii
CHAPTER 1 <b>INTRODUCTION</b>		
Section 1 General Information		
Scope. . . . .	1-1	1-1
Maintenance Forms, Records, and Reports. . . . .	1-2	1-1
Destruction of Army Materiel to Prevent Enemy Use. . . . .	1-3	1-1
Preparation for Storage or Shipment. . . . .	1-4	1-2
Official Nomenclature, Names, and Designation. . . . .	1-5	1-2
Reporting Equipment Improvement Recommendations (EIR) . . . . .	1-6	1-3
II. Equipment Description and Data		
Equipment Description and Data . . . . .	1-7	1-4
III. Technical Principles of Operation		
Technical Principles of Operation. . . . .	1-8	1-4
CHAPTER 2 ORGANIZATIONAL MAINTENANCE INSTRUCTIONS		
Section I. General		
Service Upon Receipt . . . . .	2-1	2-1
Preventive Maintenance . . . . .	2-2	2-1
II. <b>Preventive Maintenance Checks and Services (PMCS)</b>		
PMCS Procedure . . . . .	2-3	2-1
III. <b>Troubleshooting</b>		
Troubleshooting Procedure. . . . .	2-4	2-4

	IV. Maintenance Procedures	
	Cleaning . . . . .	2-5      2-6
	Touchup Painting . . . . .	2-6      2-6
	Winch Lubrication (AB-621A/G) . . . . .	2-7      2-7
APPENDIX	A. REFERENCES . . . . .	A-1
	B. <b>MAINTENANCE ALLOCATION</b>	
Section	I. Introduction. . . . .	B-1
	II. Maintenance Allocation Chart for Mast AB-621(*)/G . . . . .	B-3
	III. Maintenance Allocation Chart for Extension Kit MK-2044/G . . . . .	B-4
	IV. Tool and Test Equipment Requirements for AB-621(*)/G and MK-2044/G	B-5
	V. Remarks	B-6
APPENDIX	C. EXPENDABLE SUPPLIES AND MATERIALS LIST	
Section	I. Introduction. . . . .	C-1
	II. Expendable Supplies and Materials List .	C-2

HOW  
TO USE  
THIS MANUAL

- This technical manual covers maintenance procedures for use by organizational level repair personnel to maintain the AB-621(\*)/G antenna mast, and MK-2044/G extension kit.
- The following equipment is covered:
  - AB-621/G Mast, 50 foot.
  - AB-621A/G Mast, 50 or 100 foot.
  - MK-2044/G Extension Kit, (to 100 foot)  
used with AB-621A/G.
- Instructions apply to all AB-621(\*)/G installations except when specific nomenclature notes appear. This notation method is used to identify items that are different between AB-621/G and AB-621A/G installations.
- The notation MK-2044/G is used to identify items used with the extension kit.
- Carefully follow all the cautions and warnings in this manual.

## CHAPTER 1 INTRODUCTION

## Section I. GENERAL INFORMATION

## 1-1. Scope

Type of Manual: Organizational Maintenance

Model Number and Equipment Name:

AB-621(\*)/G - Mast, Antenna  
(Includes AB-621/G and AB-621A/G).  
MK-2044/G - Kit, Extension

Purpose of Equipment:

Portable antenna mast used to support a variety of directional radio antennas, to an elevation of 50 or 100 feet.

## 1-2. Maintenance Forms, Records, and Reports

a. Reports 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 (Army). Air Force personnel will use AFM 66-1 for maintenance reporting and TO-00-35D54 for unsatisfactory equipment reporting. Navy personnel will report maintenance performed utilizing the Maintenance Data Collection Subsystem (MDCS) IAW OPNAVINST 4790.2, vol 3 and unsatisfactory material/conditions (UR submissions) IAW OPNAVINST 4790.2, vol 2, chapter 17.

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/AFR 400-54/MCO 4430.3E.

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 4610.33B/AFR 75-18/MCO P4610.19C/DLAR 4500.15.

## 1-3. Destruction of Army Materiel to Prevent Enemy Use

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

1-4. Preparation for Storage or Shipment

a. Refer to TM 11-5985-334-10 to remove the AB-621(\*)/G and MK-2044/G from service and pack for storage.

b. Administrative storage of the AB-621(\*)/G and MK-2044/G will be handled as follows. The requirements apply whether the mast is stored with an associated radio, or stored alone.

(1) Before and after storage, perform the following:

(a) Clean the unit (para 2-6) and spot-paint bare metal parts (para 2-7).

(b) Perform monthly preventive maintenance checks and services (para 2-3). Correct all deficiencies.

(2) Store in dry, moisture free area. Records and reports shall be maintained as prescribed in TM 38-750 for equipment in use.

1-5. Official Nomenclature, Names, and Designation

The following nomenclatures are covered in this manual; these designation are used to identify specific items that are used at your installation.

<u>Designation</u>	<u>Model /Equipment</u>
AB-621/G	MAST, ANTENNA 50 foot
AB-621A/G	MAST, ANTENNA 50 or 100 foot
MK-2044/G	KIT, EXTENSION

NOTE

The designation AB-621(\*)/G when used in this manual means that the instruction applies to both the AB-621/G and AB-621A/G. Also, when instructions are given for components without model reference, the information applies to both models. MK-2044/G is used to identify those items which are used exclusively with the extension kit.



#### 1-6. Reporting Equipment Improvement Recommendations (EIR)

If your AB-621(\*)/G or MK-2044/G 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 us at Commander, US Army Communications - Electronics Command and Fort Monmouth, Attn: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703. We'll send a reply.

## Section II. EQUIPMENT DESCRIPTION AND DATA

### 1-7. Equipment Description and Data

Refer to TM 11-5985-334-10, Operator's Manual, for complete equipment description and data on the AB-621(\*)/G and MK-2044/G.

## Section III. TECHNICAL PRINCIPLES OF OPERATION

### 1-8. Technical Principles of Operation

The AB-621(\*)/G is a portable arrangement of equipment used for the mounting of a variety of directional radio antennas. The mast, with the antenna mounted, is erected section by section to an elevation of 50 feet (100 feet when AB-621A/G is used with extension kit MK-2044/G) and then supported and guyed in place. After the mast and associated antenna are elevated and secured, they can be rotated to the required direction for radio transmission.

## CHAPTER 2

## ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

## Section I. GENERAL

## 2-1. Service Upon Receipt

Refer to TM 11-5985-334-10, Operator's Manual, for complete instructions on servicing the AB-621(\*)/G and MK-2044/G upon receipt.

## 2-2. Preventive Maintenance

a. Preventive maintenance is the systematic care, inspection and servicing of equipment to maintain it in serviceable condition to prevent breakdown, and to assure maximum operation efficiency. Preventive maintenance is the responsibility of all categories of maintenance concerned with the equipment. It includes inspection and repair or replacement of parts, subassemblies, or units that inspection indicate would probably fail before the next scheduled periodic service.

b. Maintenance forms and records to be used and maintained on the equipment are specified in TM 38-750.

## Section II. PREVENTIVE MAINTENANCE CHECK AND SERVICES (PMCS)

## 2-3. PMCS Procedure

Perform the maintenance functions indicated in the monthly preventive maintenance checks and services chart (table 2-1) once each month unless otherwise directed by the commanding officer. A month is defined as approximately 30 calendar days of 8 hour-per-day operation. If the equipment is operated 16 hours per day, the monthly preventive maintenance checks and services should be performed at 15-day intervals. Adjustment of the maintenance interval must be made to compensate for any unusual operating conditions. Equipment maintained in a standby (ready for immediate operation) condition must have monthly preventive checks and services. Equipment in limited storage (requires services before operation) does not require monthly preventive maintenance.

Table 2-1. Organizational Monthly Preventive Maintenance Checks and Services

Item No,	Item To Be Inspected	Procedures
1	Publications	See that all publications are complete, serviceable and current, using DA Pam 310-1.
2	Modifications	Check DA Pam 750-10 to determine if new applicable MWO'S have been published. ALL URGENT MWO'S must be applied immediately. All NORMAL MWO'S must be scheduled.
3	Spare parts	Check all spare parts (operator and organizational) for general condition and method of storage. No overstock should be evident, and all shortages must be on valid requisitions.
4	Equipment mountings	Check to see that equipment mountings such as frames, braces, and clamps are not bent, broken, or out of shape. Tighten loose bolts, nuts, and screws that hold the equipment. Replace missing bolts, screws, nuts, and washers. Replace all badly burred screws, bolts, and nuts which cannot be engaged or turned with a screwdriver or wrench.
5	Guy assemblies and control guys	Check the guy assemblies for bends, kinks, and fraying. Check the tensioners for smooth operation. Replace a damaged guy assembly.
6	Framework	Check the frame of the launcher, the mast carrier, mast sections, guy rings, and mast cap for bends, dents or scratches. Replace damaged components for which spares are authorized.
7	Mast position	Check to see that the mast is in a true vertical position.
8	Canvas bags	Check the accessory and guy bags and other carrier and contents. Replace or repair damaged parts.
9	Metal surfaces	Inspect metal surfaces for corrosion. Clean and paint as required (para 2-7).

Table 2-1. Organizational Monthly Preventive Maintenance Checks and Services - Continued

Item No,	Item To Be Inspected	Procedures
10	Winch assembly	Check the operation of the winch for smooth operation. If operation is faulty replace the winch. Check lubricant level on the AB-621A/G winch (para 2-8).
11	Elevator platform	Check the elevator for smoothness of operation. If operation is faulty, refer to higher level of maintenance for repair.
12	Brake assembly	Check the operation of the brake assembly. If slippage or buckling of the mast section occurs, refer to higher level of maintenance for repair.
13	Guide rollers	Check the guide rollers for smooth operation, if faulty, refer to higher level of maintenance for repair.
14	Elevator cable	Check to see that the elevator cable is not frayed or defective. Refer to higher level of maintenance for replacement of the elevator cable.
15	Guy control device (MK-2044/G)	Check the operation of the guy control device. If operation is faulty, replace the guy control device.

## Section III. TROUBLESHOOTING

## 2-4. Troubleshooting Procedure

a. The troubleshooting and repair work that can be performed at the organizational category of maintenance is necessarily limited in scope by the tools, test equipment, replaceable parts issue, and by the existing tactical situation. Accordingly, troubleshooting is based on the performance of the equipment and the use of the senses in determining component malfunctions. Refer to the troubleshooting chart (para 2-5) for observable malfunctions and corrective actions that can be taken for an installed system.

b. Organizational personnel are authorized to replace most system components (see appx B) repair of removed components is to be directed to higher level of maintenance.

Table 2-2. Troubleshooting

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
1. MAST SWAYING		
	<u>Step 1.</u> Check for loose or damaged anchors.	Place a second anchor into ground beside the loose anchor and transfer guys to the second anchor.
	<u>Step 2.</u> Check for guy slackness.	Tighten guys.
	<u>Step 3.</u> Check tensioner slippage.	Replace guy assembly.
	<u>Step 4.</u> Check if launcher is solid on ground.	Tighten all guys. Reinstall the launcher on a soft earth base.
2. ANTENNA AZIMUTH SHIFTED		
	<u>Step 1.</u> Check for brake not set.	Readjust antenna azimuth and set brake.
	<u>Step 2.</u> Check for defective brake.	Repair brake. Refer to next higher echelon of maintenance.

Table 2-2. Troubleshooting - Continued

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
3. WINCH SLIPS		
	<u>Step 1.</u>	Check for damaged hand crank or hardware. Replace winch.
	<u>Step 2.</u>	Check for damaged winch mechanism. Replace winch.
	<u>Step 3.</u>	If winch is not at fault, check elevator operation. Refer to next higher echelon of maintenance.
4. ELEVATOR WON'T RAISE OR LOWER		
		Refer to next higher echelon of maintenance.
5. ELEVATOR OPERATION IS ERRATIC		
	<u>Step 1.</u>	Check winch (3 above).
	<u>Step 2.</u>	Refer to next higher echelon of maintenance.
6. BRAKE WON'T HOLD		
	<u>Step 1.</u>	Check brake adjustment. Adjust brake.
	<u>Step 2.</u>	Check for damaged brake. Refer to next higher echelon of maintenance.

## Section IV. MAINTENANCE PROCEDURES

## 2-5. Cleaning

- a. Remove dust and loose dirt with a clean, soft cloth.

**WARNING**

Adequate ventilation should be provided while using TRICHLOROTRIFLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRICHLOROTRIFLUOROETHANE dissolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician.

- b. Remove grease, fungus, and ground-in dirt with a cloth dampened (not wet) with trichlorotrifluoroethane (item 1, appx c).

- c. Clean the guys by washing them; allow items to dry thoroughly.

## 2-6. Touchup Painting

Use the following instructions to clean and repaint equipment which has been badly scarred or damaged.

**WARNING**

Adequate ventilation should be provided while using TRICHLOROTRIFLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRICHLOROTRIFLUOROETHANE dissolves natural oils, prolonged contact with the skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician.

- a. Lightly sand scarred equipment with #00 or #000 sandpaper and clean to bare metal with trichlorotrifluoroethane (item 1, appx C).

- b. Brush two coats of paint (enamel, alkyd, camouflage, color or Forest Green per MIL-E-52798) (item 2, appx C) on the metal.

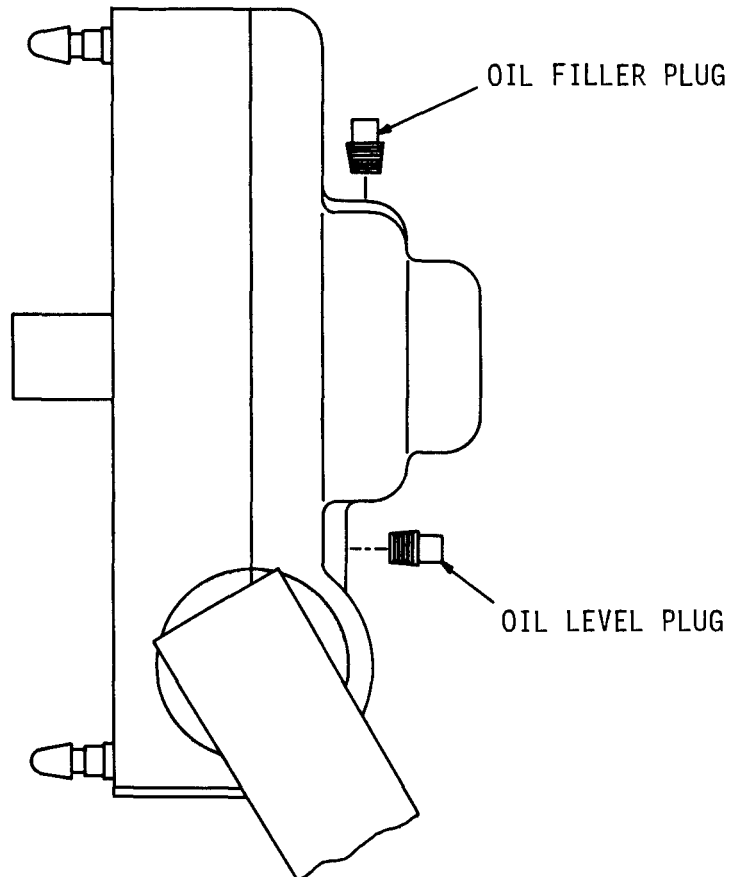
## NOTE

Refer to applicable cleaning and refinishing practices specified in SB 11-573 and TB 43-0118.



## 2-7. Winch Lubrication (AB-621A/G)

Refer to figure 2-1 to check lubrication of the winch assembly.



## STEP

- A. REMOVE OIL FILLER PLUG (UPPER).
- B. REMOVE OIL LEVEL PLUG (LOWER).
- C. ADD OIL (ITEM 3, APPX C) USING OIL FILLER HOLE (UPPER).
- D. WINCH RESERVOIR IS FULL WHEN OIL RUNS OUT OF OIL LEVEL HOLE (LOWER).
- E. INSTALL BOTH PLUGS.

Figure 2-1. Winch assembly, lubrication checkpoint. EL7ZA001



## APPENDIX A

## REFERENCES

---

Following is a list of applicable publications available to organizational maintenance personnel of Mast AB-621(\*)/G and MK-2044/G:

AR 380-5	Safeguarding Defense Information.
DA Pam 310-1	Consolidated Index of Army Publications and Blank Forms.
FM 5-25	Explosives and Demolitions.
SB 38-100	Preservation, Packaging, Packing and Marking Materials, Supplies, and Equipment Used by the Army.
SB 11-573	Painting and Preserving Supplies Available for Field Use for Electronics Command Equipment.
TB SIG 291	Safety Measures to be Observed When Installing and Using Whip Antennas, Field Type Masts, Towers, Antennas, and Metal Poles That Are Used with Communication, Radar, and Direction Finder Equipment.
TB 385-4	Safety Precautions for Maintenance of Electrical and Electronic Equipment.
TB 43-0118	Field Instructions for Painting and Preserving Electronics Command Equipment Including Camouflage Pattern Painting of Electrical Equipment Shelters.
TM 11-5985-334-10	Operator's Manual: Mast AB-621/G (NSN 5985-00-782-5278), Mast AB-621A/G (5985-01-061-2828), and Extension Kit MK-2044/G (5985-01-119-2925).
TM 11-5985-334-20P	Organizational Maintenance Repair Parts and Special Tools Lists for Mast AB-621/G (NSN 5985-00-782-5278).
TM 11-5985-334-20P-1	Organizational Maintenance Repair Parts and Special Tools Lists, AB-621A/G and MK-2044/G.
TM 750-244-2	Procedures for Destruction of Electronics Materiel to Prevent Enemy Use (Electronics Command).
TM 38-750	The Army Maintenance Management System (TAMMS).



## APPENDIX B MAINTENANCE ALLOCATION

---

### Section I. INTRODUCTION

#### B-1. General

This appendix provides a summary of the maintenance operations for AB-621/G, AB-621A/G and MK-2044/G. 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.

#### B-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, hydraulic 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 and diagnostic equipments used in precision measurement. Consists of comparisons of two instruments, one of 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 act 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 with original manufacturing standards. Rebuild is the highest degree of materiel 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.

### B-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 perform the 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 required to restore an item (assembly, subassembly, component, module, end item or system) to a serviceable condition under typical field operation 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 sets (not individual tools) and special tools, test, 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 section IV, Remarks, which is pertinent to the item apposite the particular code.

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

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

c. **Nomenclature.** This column lists the noun name and 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 parentheses.

**B-5. Remarks (Sect. IV)**

a. **Reference Code.** This code 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

MAST AB-

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY					(5) TOOLS AND EQPT.	(6) REMARKS
			C	O	F	H	D		
00	MAST AB-621(*)/G	INSPECT	0.5					4	A
		TEST	0.3					1	B
		TEST		0.5					C
		SERVICE	0.2						
		SERVICE		0.3					
		ADJUST	0.7						D
		REPLACE		0.5				1	
		REPAIR		1.0				1	F
		REPAIR			2.0			1,2	G
		OVERHAUL					40.0	2,3	
01	LAUNCHER ASSY	INSPECT	0.2						A
		TEST		0.4				1	C
		SERVICE		0.2					
		ADJUST	0.5						E
		REPLACE		1.0				1	
		REPAIR			1.0			1,2	H
		REPAIR			2.0			1,2	I
		OVERHAUL					20.0	2,3	



SECTION III. MAINTENANCE ALLOCATION CHART  
FOR  
EXTENSION KIT MK-2044/G

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY					(5) TOOLS AND EQPT.	(6) REMARKS
			C	O	F	H	D		
00	EXTENSION KIT MK-2044/G	INSPECT	0.2						
		TEST		0.3				1	A
		SERVICE	0.1						C
		SERVICE		0.2					
		ADJUST	0.5						D
		REPLACE		0.5				1	
		REPAIR		1.0				1	J
01	GUY CONTROL DEVICE	REPAIR			2.0			1,2	K
		REPAIR				2.0		1,2	L
		OVERHAUL					20.0	2,3	
		INSPECT	0.1						A
		TEST	0.2					1	C
		SERVICE	0.1						
		REPLACE		1.0				1	
		REPAIR			1.0			1,2	M
		REPAIR					2.0	2,3	N
		OVERHAUL					18.	2,3	

SECTION IV. TOOL AND TEST EQUIPMENT REQUIREMENTS  
FOR  
AB-621(\*)/G AND MK-2044/G

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/ NATO STOCK NUMBER	TOOL NUMBER
1	0	TOOL KIT, ELECTRONIC EQUIPMENT, TK-101/G	5810-00-064- 5178	
2	F,H,D	TOOL KIT, ELECTRONIC EQUIPMENT, TK-100/G	5180-00-605- 0079	
3	F,H,D	TOOL KIT, ELECTRONIC EQUIPMENT, TK-105/G	5180-00-610- 3177	
4	C	POCKET TRANSIT		

## SECTION V. REMARKS

Reference Code	
A	VISUAL INSPECTION OF EQUIPMENT.
B	OPERATIONAL TEST USING ASSOCIATED RADIO EQUIPMENT.
C	ALL TEST TO LOCATE DEFECTIVE COMPONENT.
D	ADJUSTMENT OF GUY TENSION.
E	BRAKE ADJUSTMENT.
F	REPAIR BY REPLACEMENT OF LEVEL ASSY, CASE, OTHER SELECTED PARTS .
G	REPAIR BY REPLACEMENT OF SELECTED LAUNCHER COMPONENTS.
H	REPAIR BY REPLACEMENT OF ELEVATOR ASSY, GUIDE ASSY, BRAKE ASSY, PULLY, REEL ASSY, OTHER SELECTED PARTS.
I	WINCH ASSY, LEVEL, CASE, ELEVATOR, OTHER SELECTED PARTS.
J	REPAIR BY REPLACEMENT OF MAST CARRIER, GUY CONTROL DEVICE, WINCH ASSY, LOCK-OUT ASSY, TRANSIT CASE, OTHER SELECTED PARTS.
K	GUY CONTROL DEVICE, LOCK-OUT DEVICE, TRANSIT CASE, MAST CARRIER.
L	WINCH ASSY, HEAVY.
M	REPAIR BY REPLACEMENT OF GEAR BOX ASSY, CABLE RETURN SPRING ASSY, REEL ASSY, OTHER SELECTED PARTS.
N	GEAR BOX ASSY, SHAFT ASSY.



## APPENDIX C

### EXPENDABLE SUPPLIES AND MATERIALS LIST

---

#### Section I. INTRODUCTION

##### C-1. Scope

This appendix lists expendable supplies and materials you will need to operate and maintain the AB-621/G, AB-621A/G and the MK-2044/G. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

##### C-2. Explanation of Columns

**a. Column 1 — Item Number.** This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 5, App. D").

**b. Column 2 — Level.** This column identifies the lowest level of maintenance that requires the listed item.

- C — Operator/Crew
- O — Organizational Maintenance
- F — Direct Support Maintenance
- H — General Support Maintenance

**c. Column 3 — National Stock Number.** This is the National stock number assigned to the item; use it to request or requisition the item.

**d. Column 4 — Description.** Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the part number followed by the Federal Supply Code for Manufacturer (FSCM) in parentheses, if applicable.

**e. Column 5 — Unit of Measure (U/M).** Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e. g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

## SECTION II EXPENDABLE SUPPLIES AND MATERIALS LIST

(1)	(2)	(3)	(4)	(5)
ITEM NUMBER	LEVEL	NATIONAL STOCK NUMBER	DESCRIPTION	U/M
1	C, O	6810-00-292-9625	-TRI CHLOROTRI FLUOROETHANE OT620 (81348)	OZ
2	O	8010-00-039-5939	PAINT, SOLAR REFLECTING, FOREST GREEN, MIL-E-52789A (ME)	QT
3	O		OIL, LUBRICATING (MOBIL 600 W) SAE No, 140	QT



THEN... JOT DOWN THE  
DOPE ABOUT IT ON THIS  
FORM. CAREFULLY TEAR IT  
OUT. FOLD IT AND DROP IT  
IN THE MAIL!

# SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

Commander  
Stateside Army Depot  
ATTN: AMSTA-US  
Stateside, N.J. 07703

DATE SENT

10 July 1975

PUBLICATION NUMBER

TM 11-5840-340-12

PUBLICATION DATE

23 Jan 74

PUBLICATION TITLE

Radar Set AN/PRC-76

BE EXACT. PIN-POINT WHERE IT IS

PAGE NO	PARA- GRAPH	FIGURE NO	TABLE NO
2-25	2-28		
3-10	3-3		3-1
5-6	5-8		
		FO3	

IN THIS SPACE TELL WHAT IS WRONG  
AND WHAT SHOULD BE DONE ABOUT IT:

Recommend that the installation antenna alignment procedure be changed throughout to specify a 2° IFF antenna lag rather than 1°.

REASON: Experience has shown that with only a 1° lag, the antenna servo system is too sensitive to wind gusting in excess of 25 knots, and has a tendency to rapidly accelerate and decelerate as it hunts, causing strain to the drive train. Hunting is minimized by adjusting the lag to 2° without degradation of operation.

Item 5, Function column. Change "2 db" to "3db."

REASON: The adjustment procedure the the TRANS POWER FAULT indicator calls for a 3 db (500 watts) adjustment to light the TRANS POWER FAULT indicator.

Add new step f.1 to read, "Replace cover plate removed in step e.1, above."

REASON: To replace the cover plate.

Zone C 3. On J1-2, change "+24 VDC to "+5 VDC."

REASON: This is the output line of the 5 VDC power supply. +24 VDC is the input voltage.

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SSG I. M. DeSpirito 999-1776

SIGN HERE

*[Signature]*

DA FORM 2028-2  
1 JUL 79

PREVIOUS EDITIONS  
ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR  
RECOMMENDATION MAKE A CARBON COPY OF THIS  
AND GIVE IT TO YOUR HEADQUARTERS





FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314



OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

Commander  
US Army Communications-  
Electronics Command and Fort Monmouth  
ATTN: DRSEL-ME-MP  
Fort Monmouth, New Jersey 07703

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE  
DOPE ABOUT IT ON THIS  
FORM. CAREFULLY TEAR  
IT OUT, FOLD IT AND  
DROP IT IN THE MAIL.

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM 11-5985-334-20

PUBLICATION DATE

PUBLICATION TITLE

MAST AB-621/G,  
AB-621A/G, EXTENSION KIT MK-2044/G

BE EXACT PIN-POINT WHERE IT IS

PAGE  
NO.

PARA-  
GRAPH

FIGURE  
NO.

TABLE  
NO.

IN THIS SPACE TELL WHAT IS WRONG  
AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 2028-2  
1 JUL 79

PREVIOUS EDITIONS  
ARE OBSOLETE

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR  
RECOMMENDATION MAKE A CARBON COPY OF THIS  
AND GIVE IT TO YOUR HEADQUARTERS.

TEAR ALONG PERFORATED LINE

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314



OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

Commander  
US Army Communications-  
Electronics Command and Fort Monmouth  
ATTN: DRSEL-ME-/ MP  
Fort Monmouth, New Jersey 07703

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE  
DOPE ABOUT IT ON THIS  
FORM. CAREFULLY TEAR  
IT OUT, FOLD IT AND  
DROP IT IN THE MAIL.

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM 11-5985-334-20

PUBLICATION DATE

PUBLICATION TITLE

MAST AB-621/G,

AB-621A/G, EXTENSION KIT MK-2044/G

BE EXACT PIN-POINT WHERE IT IS

PAGE  
NO.

PARA-  
GRAPH

FIGURE  
NO.

TABLE  
NO.

IN THIS SPACE TELL WHAT IS WRONG  
AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 2028-2  
1 JUL 79

PREVIOUS EDITIONS  
ARE OBSOLETE

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR  
RECOMMENDATION MAKE A CARBON COPY OF THIS  
AND GIVE IT TO YOUR HEADQUARTERS.

TEAR ALONG PERFORATED LINE

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314



OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

Commander  
US Army Communications-  
Electronics Command and Fort Monmouth  
ATTN: DRSEL-ME. MP  
Fort Monmouth, New Jersey 07703

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE  
DOPE ABOUT IT ON THIS  
FORM. CAREFULLY TEAR  
IT OUT, FOLD IT AND  
DROP IT IN THE MAIL.

**SOMETHING WRONG** WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM 11-5985-334-20

PUBLICATION DATE

PUBLICATION TITLE MAST AB-621/G,  
AB-621A/G, EXTENSION KIT MK-2044/G

BE EXACT PIN-POINT WHERE IT IS

PAGE  
NO.

PARA-  
GRAPH

FIGURE  
NO.

TABLE  
NO.

IN THIS SPACE TELL WHAT IS WRONG  
AND WHAT SHOULD BE DONE ABOUT IT:

TEAR ALONG PERFORATED LINE

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 2028-2  
1 JUL 79

PREVIOUS EDITIONS  
ARE OBSOLETE

P.S.-IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR  
RECOMMENDATION MAKE A CARBON COPY OF THIS  
AND GIVE IT TO YOUR HEADQUARTERS.

**By Order of the Secretary of the Army**

EDWARD C. MEYER  
General, United States Army  
Chief of Staff

Official:

ROBERT M. JOYCE  
Major General, United States Army  
The Adjutant General

**DISTRIBUTION:**

To be distributed in accordance with DA Form 12-51, Operation maintenance requirements for AB-621/G.





This fine document...

Was brought to you by me:



### [Liberated Manuals -- free army and government manuals](#)

Why do I do it? I am tired of sleazy CD-ROM sellers, who take publicly available information, slap “watermarks” and other junk on it, and sell it. Those masters of search engine manipulation make sure that their sites that sell free information, come up first in search engines. They did not create it... They did not even scan it... Why should they get your money? Why are not letting you give those free manuals to your friends?

I am setting this document FREE. This document was made by the US Government and is NOT protected by Copyright. Feel free to share, republish, sell and so on.

I am not asking you for donations, fees or handouts. If you can, please provide a link to [liberatedmanuals.com](http://liberatedmanuals.com), so that free manuals come up first in search engines:

<A HREF=<http://www.liberatedmanuals.com/>>Free Military and Government Manuals</A>

- Sincerely  
Igor Chudov  
<http://igor.chudov.com/>
- [Chicago Machinery Movers](#)