This copy is a reprint which includes current pages from Change 1.

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S AND ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST AND MAINTENANCE ALLOCATION CHART FOR RESISTANCE BRIDGES ZM-4A/U AND ZM-4B/U

Headquarters, Department of the Army, Washington 25, D. C. 30 June 1959

SECTION I.	INTRODUCTION	Paragraph	Page
	Scope	1	1
	Stockage	2	2
	Batteries	3	2
	References		2
	Comments or suggestions		2
II.	FUNCTIONAL PARTS LIST		
III.	MAINTENANCE ALLOCATION		
	General	6	4
	Maintenance by using organizations	7	5
	MAINTENANCE ALLOCATION CHART		6
	ALLOCATION OF TOOLS FOR MAINTENANCE FUNCTIONS		8

SECTION I

INTRODUCTION

1. Scope

a. This manual lists items supplied for initial operation. The list includes all items authorized for basic operator maintenance of the equipment. End items of equipment are issued on the basis of allowances prescribed in equipment authorization tables and other documents that are a basis for requisitioning.

- b. The columns are defined as follows:
 - (1) Federal or technical service stock number. This column lists the 11digit Federal stock number.
 - (2) Repair parts source, maintenance, and

recoverability code. Not used.

- (3) Designation by model. Not used.
- (4) *Description.* Nomenclature or the standard item name and brief identifying data for each item are listed in this column. When requisitioning, enter the nomenclature and description on the requisition.
- (5) *Unit of issue.* The unit of issue is the supply medium by which the individual item is counted for procurement, storage, requisitioning, allowances, and issue purposes.

^{*}This manual supersedes TM 11-6625-249-12P, 10 October 1958.

- (6) *Expendability.* Expendable items are indicated by the letter X; nonexpendable items are indicated by NX.
- (7) Quantity authorized. Under "Items Comprising an Operable Equipment" the column lists the quantity of items supplied for the initial operation of the equipment.
- (8) Illustration. Not used.

2. Stockage

No parts are authorized for stockage at second echelon level.

3. Batteries

Dry batteries indicated are used with the equipment but are not considered part of the equipment. They will not be preshipped automatically but are to be requisitioned in quantities necessary for the particular organization, in accordance with SB 11-6.

4. References

Additional instructions concerning maintenance of this equipment are contained in TM 11-2019, Test Sets I-49, I-49A, and I-49B, and Resistance Bridges ZM-4A/U and ZM-4B/U.

5. Comments or Suggestions

Any comments concerning omissions and discrepancies in this manual will be prepared on DA Form 2028 and forwarded direct to Commanding Officer, U. S. Army Signal Equipment Support Agency, Fort Monmouth, N. J., ATTN : SIGFM/ES-ML.

HEADQUARTERS DEPARTMENT OF THE ARMY Washington, DC, 16 July 1984

No. 1

OPERATOR'S AND ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST AND MAINTENANCE ALLOCATION CHART FOR RESISTANCE BRIDGES ZM-4A/U AND ZM-4B/U (6625-00-500-0937)

TM 11-6625-249-12P, 30 June 1959, is changed as follows:

Page 8, Section II.1 is added after Section II.

SECTION II.1

CROSS REFERENCE INDEX. The Cross-Reference Index is a cross-reference listing of part number to National Stock Number.

a. <u>Use of Cross-Reference Index</u>. To order a part listed in the Cross-Reference Index, note part number and then cross-reference that part number to the National Stock Number in the cross-reference index. Then order through normal ordering channels.

b. <u>Ordering Part Numbers Without National Stock Number</u>. If the part number does not have a National Stock Number, then order the part through normal ordering channels using the part number and the FSCM.

CROSS REFERENCE INDEX FORMAT

		PARTS WITH AN FSN	
FSN	NEW NSN	FSCM	PART NUMBER
61351201020 66255705722	6135001201020 6625005000937	80058 80058	BA-30 ZM-4A,B/U

3

By Order of the Secretary of the Army:

JOHN A. WICKHAM JR. General, United States Army Chief Of Sfaff

Official:

ROBERT M. JOYCE Magor General, United States A r m y The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-36B, Operator/Crew Maintenance requirements for ZM-4A and B/U.

SECTION II								
	SECTION II. FU	JNCTIONAL PARTS L	IST					
(1)	(2) REPAIR PARTS SOURCE, MAINTENANCE	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FEDERAL OR	AND	DESIGNATAION					ILLUSTR	
TECHNICAL SERVICE	RECOVERABLITY	BY		UNIT OF		QUANTITY		
STOCK NUMBER	CODE	MODEL	DESCRIPTION	ISSUE	EXPENDABILITY	AUTHORIZED	NO.	NO.
			ITEMS COMPRISING AN OPERABLE EQUIPMENT RESISTANCE BRIDGE ZM-4A,B/U					
6625-570-5722			RESISTANCE BRIDGE ZM-4A,B/U: 0.1 OHM TO 1 MEG RANGE: ±0.1%: DC OPERATION: MIL SPEC MIL-R 1:729 (SIGC)	EA	NX			
ORDER THRU AGC			TECHNICAL MANUAL TM11-2019	EA	Х	2		
			BARE UNIT: FOR RESISTANCE BRIDGE ZM-4A/U: ZM-4B/U	EA	NX	1		
6135-120-1020			BATTERY BA-30	EA	X	3		
			RUNNING SPARES AND ACCESORY ITEMS					
			RESISTANCE BRIDGE ZM-4A, B/U					
			NO PARTS AUTHORIZED FOR STOCKAGE AT FIRST ECHELON					

SECTION III

6. General

a. The maintenance allocation chart assigns maintenance functions and repair operations to be performed by the lowest appropriate maintenance echelon. It also specifies the tools and other equipment authorized at each echelon to perform the assigned maintenance functions.

b. Columns in the Maintenance Allocation chart are defined as follows:

- (1) Part or component. Only the nomenclature or standard item name is annotated in this column. Additional descriptive data is included only where clarification is necessary to identify the part. Components and parts comprising a major end item are listed alphabetically. Assemblies and subassemblies are in alphabetical sequence with their components listed alphabetically immediately below the assembly listing.
- (2) *Maintenance function.* This column indicates the various maintenance functions allocated to the echelon capable of performing the operation. These are defined as follows:
 - (a) Service. To clean, to preserve, and to replenish fuel and lubricants.
 - (b) Inspect. To verify serviceability and to detect incipient electrical or mechanical failure by scrutiny.
 - (c) *Test.* To verify serviceability and to detect incipient electrical or mechanical failure by use of special equipment such as gages and meters.
 - *(d) Replace.* To substitute serviceable assemblies, subassemblies, a n d parts for unserviceable components.
 - (e) Repair. To restore to a serviceable condition by replacing unserviceable parts or by any other action required utilizing tools equipment, and skills available, to include weld-

ing, grinding, riveting, straighten. ing, adjusting, etc.

- (f) Aline. To adjust two or more components of an electrical system so that their functions are properly synchronized.
- (g) Calibrate. To determine, check, or rectify the graduation of an instrument, weapon, or weapons system, or components of a weapons system.
- (h) Rebuild. To restore to a condition comparable to new by disassembling the item to determine the condition of its component parts and reassembling it using serviceable, rebuilt, or new assemblies, subassemblies, and parts.
- (3) 1st, 2d, 3d, 4th, and 5th echelon. The symbol X indicates the echelon responsible for performing that particular maintenance operation, but does not necessarily indicate that repair parts will be stocked at that level. Echelons higher than the echelon marked by X are authorized to perform the indicated operation.
- (4) *Tools required.* The numbers in column 8 indicate the tool, test, and maintenance equipment required to perform the maintenance functions. These numbers are identified in the Allocation of Tools for Maintenance Functions portion.
- (5) *Remarks.* This column contains any notations necessary to clarify the data cited in the preceding columns.

c. Columns in the Allocation of Tools for Maintenance Functions portion are defined as follows :

- (1) *Tools required for maintenance functions.* Column 1 lists tool and test equipment required to perform the maintenance functions.
- (2) 1st, 2d, 3d, 4th, 5th echelon. A dag-

ger (\dagger) indicates that the tool or test equipment is allocated to that echelon.

- (3) *Tool code.* The numbers in column 7 are code numbers that stand for the associated tool equipment and are used in the Maintenance Allocation to refer to the indicated item.
- (4) *Remarks.* This column is used for explanatory notes.

7. Maintenance by Using Organizations

When this equipment is used by signal service organizations organic to theater headquarters or communication zones to provide theater communications, those maintenance functions allocated up to and including fourth echelon are authorized to the organization operating this equipment.

MAINTENANCE ALLOCATION CHART

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PART OR COMPONENT	RELATED OPERATION	ist ECH	2nd ECH			5th ECH	REPAIR FACILITIES CODE	REMARKS
RESISTANCE BRIDGE 2M-4A/U; ZM-4B/U			<u> </u>	†	<u> </u>			
	service	1		X	1			
	inspect	X				'		
·	test	1			x		1	
	repair		1		x		1,2,3	
	align					x	1,2,3	
	calibrate					x	1,2,3	
	rebuild	1				x	1,2,3	
CASE, TEST SET	inspect	x	Ι	T				
· · · · · · · · · · · · · · · · · · ·	repair	1	}	x		1	3	
	rebuild					X	3	
BATTERY	inspect	X			1	1		
	replace	X			1	1		
BATTERY BOX	inspect		1	X		1		
DAT CARLE DOG	rebuild	1			x	ļ	3	
BRACKETS	inspect	1	1	X	1	<u>† </u>		
JAGALIO	replace	Į			x		3	Not stocked, fabricate
CHAIN, BEAD	inspect	X	1	+				
	replace			x			3	Not stocked, obtain from salvage
CONTACTS	inspect		+	X		<u>├</u> ──		
CONTACTS	replace		}	1	x		3	Not stocked, fabricate
COVER, BATTERY BOX	inspect		+	+ x	_		<u>+</u>	
COVER, BATTERT BOX	replace				x		3	Not stocked, fabricate
FASTENERS	inspect	+ x	+	+	┼───	+		
FASIENERS		1 1		x			3	Not stocked, obtain from salvage
GASKET	replace ' inspect	-+	+	$\frac{n}{x}$		1		
GASKET	replace			1 "	x		3	Not stocked, fabricate
GROMMETS	inspect	x		+	+	4		
GRUMMETS	replace	1 ^		x		1	3	Included in Maintenance Kit
			+	$\frac{\pi}{x}$	_	+		
HANDLE, CASE	inspect		1	^	x		3	Not stocked, fabricate
	replace	x	+	+	+-^-	┨───	<u>+</u>	
HINGE	inspect	1 ^		x		1	3	Not stocked, obtain from salvage
	replace	+	+	$+^{-}$	+	+	+	
INSERT, SCREW THREAD	inspect	1	1	x	1	1	3	Not stocked, obtain from salvage
	replace		+	+-^	+	+		The second obvier the same
LABEL, INSTRUCTIONS	inspect	x			l	ł	3	
	replace			X	4	.l	ļ	

NAMEPLATE inspect replace X SCHEMATIC DIAGRAM inspect replace X SCHEMATIC DIAGRAM inspect replace X	() PART OR COMPONENT	(2) RELATED OPERATION	lst	8-4			5th	(B) REPAIR FACILITIES CODE	(9) REMARKS
NAME/LATE regises I I X B SOGENATIC DIAGRAM implet I I X S FRONT FANEL ASSEMPLY implet X X S GALVANOWETER implet X X S Inspect X X S S Kooket implet X X S NOIS implet X X S NOIS replace X X S NOIS replace X S S NUTS replace X S S FAUKE SPA	1-4A/U; ZM-4B/U (continued)								
SGEMANTLC DLACAM Import X X 3 FRONT PANEL ASSEMBLY Import X X 3 FRONT PANEL ASSEMBLY Import X X 3 GLAVANOWETER Import X X 3 GLAVANOWETER Import X X 3 GLAVANOWETER Import X X 3 GALVANOWETER Import X X 3 KNORS Import X X 3 MARKET Feplace X X 3 PLATE, SPACENCO Importin X 3 RESISTOR Feplace X X 3 RESISTOR Feplace X 3 Not stacked, fabricate SPATON Import X 3 S SPATONE Feplace X 3 S SPATONE Feplace	NAMEPLATE		1.	1		^			
SURMULT USEAM replace X S FRONT PANEL ASSEMBLY import X X S replace X X S replace X X S replace X S NUTS replace X replace X S PAXA replace X replace X S replace X S PAXA replace X replace X S replace X S replace X S replace X S r			 	 		-v-	<u>^</u>		
PRONT PANEL ASSEMELY Inspect replace X X X X GALVANOMETER inspect replace inspect replace X 3 GALVANOMETER inspect replace X 2 NOBS inspect replace X 2 MUCKET replace X 3 PATE spect X 3 MUCKET replace X 3 PATE replace X 3 PATE replace X 3 NUTS replace X 3 PATE spect X 3 PATE spect X 3 PATE spect X 3 PATE spect X 3 Pate X 3 Net stocked, fabricate PATE replace X 3 PATE replace X 3 SPACES replace X 3 SPACES replace <t< td=""><td>SCHEMATIC DIAGRAM</td><td></td><td></td><td></td><td></td><td> ^</td><td>v</td><td>3</td><td></td></t<>	SCHEMATIC DIAGRAM					^	v	3	
FRONT FANEL ASSEMBLY Implace repair repair repair A x X x X x 3 x GALVANOMETER imspect test replace X x X x 2 x NORS imspect replace X x 2 x NORS imspect replace X x 3 x PLATE, SPACING imspect replace X x 3 x PLATE, SPACING imspect replace X x 3 x FOST, BINDING imspect replace X x 3 x SCHENS replace X x 3 x STICH, HISH imspect replace X x 3 x SUTCH, HISH imspect replace X x 3 x SUTCH, HISH imspect replace X x 3 x SUTCH, HISH imspect replace X x 3 x THURWAL LUOS replace X x 3 x THURG replace X x 3 x<						ļ	<u>+</u> ^−	L	
ALVANOMETERImport replateXX3GALVANOMETERImspect replaceXX3ROUSImspect replaceXX3KNOISreplace replaceX3MUNITreplace replaceX3MUNITreplace replaceX3MUNITreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3PANILreplace replaceX3RESISTORreplace replaceX3RESISTORreplace replaceX3RESISTORreplace replaceX3RESISTORreplace replaceX3RESISTORreplace replaceX3RESISTORreplace replaceX3RESISTORreplace replaceX3RESISTORreplace replaceX	FRONT PANEL ASSEMBLY		<u>^</u> .		v	1		3	
CALVANOMETENrebuildrebuildxx3Inspect replacexx2NOUSinspect replacex3MCART replacereplacex3MCART MTSreplacex3NATS PANELreplacex3PLATE, SPACINGinspect replacex3RESISTORInspect replacex3SCREMSreplacex3SCREMSreplacex3SCREMSreplacex3SCREMSreplacex3STATON, NOTANYinspect replacex3TEMINAL LUSSreplacex3SUTON, NOTANYinspect replacex3TEMINAL LUSSreplacex3SUTON, NOTANYinspect replacex3TEMINAL LUSSreplacex3TEMINAL LUSSreplacex3NERreplacex3TEMINAL LUSSreplacex3TEMINAL LUSSreplacex3TEMINAL LUSSreplacex3TEMINAL LUSSreplacexaTEMINAL LUSSreplacexaTEMINAL LUSSreplacexaTEMINAL LUSSreplacexaTEMINAL LUSSreplacexaTEMINAL LUSSreplacexaTEMINAL LUSSreplacexa					L î	v			
GALVANOMETER inspect test X X 2 trons inspect X X 3 inspect X 3 Included in Maintenance Kit MAXET replace X 3 Included in Maintenance Kit MAXET replace X 3 Included in Maintenance Kit MAXET replace X 3 Not stocked, obtain from salvage NUTS replace X 3 Not stocked, fabricate PANEL replace X 3 Not stocked, fabricate FOST, NINDING inspect X 3 Not stocked, fabricate FSISTOR replace X 3 Included in Maintenance Kit SGRDS replace X 3 Not stocked, fabricate SGRDS replace X 3 Included in Maintenance Kit SGRDS replace X 3 Not stocked, fabricate SWITGI, FUSH inspect X 3 Included in Maintenance Kit SWITGI, FUSH inspect X 3 Included in Maintenance Kit SWITGI, ROTANY inspect X 3 Included in Maintenance Kit WIRE replace X 3						n	l v	1	
CALVANUELIN test replace X 2 NOIS inspect replace X 3 NACNET replace X 3 NACNET replace X 3 NATS replace X 3 NATS replace X 3 NATS replace X 3 NATS replace X 3 PAREL inspect X 3 POST, NINDING inspect X 3 replace X 3 Not stocked, obtain from salvage POST, NINDING inspect X 3 replace X 3 Not stocked, fabricate SCREWS replace X 3 SCREWS replace X 3 STICH, PUSH inspect X 3 SURDS replace X 3 <tr< td=""><td></td><td></td><td></td><td></td><td>$\frac{1}{v}$</td><td><u> </u></td><td><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></td><td></td><td></td></tr<>					$\frac{1}{v}$	<u> </u>	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>		
replacex3KNOBSinspertXX3WACMETreplaceX3MACMETreplaceX3InspectX3PANELinspectX3PANELinspectX3PANELinspectX3PANELinspectX3PANELinspectX3PANELinspectX3PANELinspectX3POST, BINDINGinspectX3replaceX3Not stocked, fabricatePOST, BINDINGinspectX3replaceX3Included in Maintenance KitSOLENSreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stockedreplaceX3stocked <td>GALVANOMETER</td> <td></td> <td></td> <td></td> <td> ^</td> <td>l v</td> <td></td> <td>2</td> <td></td>	GALVANOMETER				^	l v		2	
NODS Inspect replace X 3 MAGNET replace X 3 MAGNET replace X 3 NUTS replace X 3 PANEL inspect X 3 PLATE, SPACING inspect X 3 POST, BLNDING inspect X 3 replace X 3 Not stocked, fabricate POST, BLNDING inspect X 3 replace X 3 Not stocked, fabricate SORDS replace X 3 SUTCH, ROTAN inspect X 3 TEMUNAL LUCS replace X 3 WIRE Peplace X 3								1	
KOBS replace X 3 MACRET replace X 3 Included in Maintenance Kit NOTS replace X 3 Included in Maintenance Kit PANEL inspect X 3 Not stocked, obtain from salvage PLATE, SPACING inspect X 3 Not stocked, fabricate POST, BINDING inspect X 3 Not stocked, fabricate POST, BINDING inspect X 3 Not stocked, fabricate POST, BINDING inspect X 3 Not stocked, fabricate RESISTOR test X 3 Not stocked, fabricate SQLPNS replace X 3 Included in Maintenance Kit SVITCH, PUSH inspect X 3 Included in Maintenance Kit SVITCH, ROTARY inspect X 3 Included in Maintenance Kit WIRE replace X 3 Included in Maintenance Kit					+	<u>+</u> -^ -		<u> </u>	
MACNET replace X 3 Included in Maintenance Kit NUTS replace X 3 Included in Maintenance Kit PANEL inspect X 3 Not storked, obtain from salvage PLATE, SPACING inspect X 3 Not storked, obtain from salvage PLATE, SPACING inspect X 3 Not storked, fabricate POST, BINDING inspect X 3 Not storked, fabricate FOST, BINDING inspect X 3 Not storked, fabricate SGREWS replace X 2 Included in Maintenance Kit SGREWS replace X 3 Included in Maintenance Kit SFACERS replace X 3 Not stocked, fabricate SWITGN, PUSH inspect X 3 Included in Maintenance Kit TERMINAL LUGS replace X 3 Included ir Maintenance Kit WIRE replace X 3 Included in Maintenance Kit	KNOBS		1		1 v			3	
MACKET 10/10° X 3 Included in Maintenance Kit PANEL inspect replace X X 3 Not storked, obtain from salvage PLATE, SFACING inspect replace X X 3 Not storked, fabricate POST. BINDING inspect replace X X 3 Not storked, fabricate POST. BINDING inspect replace X 3 Not storked, fabricate SCREWS replace X 3 Included in Maintenance Kit SCREWS replace X 3 Included in Maintenance Kit SWICO, PUSH inspect replace X 3 Included in Maintenance Kit SWICO, PUSH inspect replace X 3 Not stocked, fabricate SWITCH, ROTARY inspect replace X 3 Not stocked, fabricate SWITCH, ROTARY inspect replace X 3 Included in Maintenance Kit TERMINAL LUOS replace X 3 Included in Maintenance Kit WIRE replace X 3 Included in Maintenance Kit			<u> </u>	+	_		<u> </u>		
NTS 10 place X X 3 Not stocked, obtain from salvage PANEL inspect X 3 Not stocked, obtain from salvage PLATE, SPACING inspect X 3 Not stocked, fabricate POST, BINDING inspect X 3 Not stocked, fabricate POST, BINDING inspect X 3 Not stocked, fabricate POST, BINDING inspect X 3 Not stocked, fabricate RESISTOR test X 3 Not stocked, fabricate SQREWS replace X 3 Included in Maintenance Kit SWITCH, RUTARY inspect X 3 Not stocked, fabricate SWITCH, ROTARY inspect X 3 Included in Maintenance Kit WIRE replace X 3 Included in Maintenance Kit			┥	+	1	+	+		Included in Maintenance Kit
PARL replace X 3 Not stocked, obtain from salvage PLATE, SPACING inspect replace X 3 Not stocked, fabricate POST, BINDING inspect replace X 3 Not stocked, fabricate RESISTOR inspect replace X 3 Not stocked, fabricate SCREWS replace X 3 Included in Maintenance Kit SCREWS replace X 3 Included in Maintenance Kit SWITCH, ROTARY inspect X 3 Included in Maintenance Kit SWITCH, ROTARY inspect X 3 Included in Maintenance Kit WIRE replace X 3 Included in Maintenance Kit			<u> </u>	+		+	+		
PLATE, SPACING inspect replace X 3 Not stocked, fabricate POST, BINDING inspect replace X 3 Not stocked, fabricate RESISTOR test replace X 3 Included in Maintenance Kit SCRENS replace X 3 Not stocked, fabricate SCRENS replace X 3 Included in Maintenance Kit SWICH, ROTARY inspect X 3 Not stocked, fabricate SWICH, ROTARY replace X 3 Included in Maintenance Kit TERMINAL LUCS replace X 3 Included in Maintenance Kit WIRE replace X 3 Included in Maintenance Kit	PANEL				^	l v		3	Not stocked, obtain from salvage
PLALE, SPALAD replace x x x x x FOST, BINDING inspect X X 3 Not stocked, fabricate RESISTOR test X 2 3 RESISTOR test X 3 Included in Maintenance Kit SCREWS replace X 3 Not stocked, fabricate SCREWS replace X 3 Included in Maintenance Kit SWITCH, ROTARY inspect X 3 WIRE replace X 3			┥	+	x	+	+	+	
POST, BINDING Import X X 3 RESISTOR test X X 3 replace X X 3 SCREWS replace X 3 SCREWS replace X 3 SCREWS replace X 3 SWICOL, PUSH inspect X 3 SWITCH, ROTARY inspect X 3 replace X 3 Included in Maintenance Kit WIRE replace X 3	PLATE, SPACING				1	x		3	Not stocked, fabricate
POST. BINDING replace X 3 RESISTOR test X 2 SCREWS replace X 3 SCREWS replace X 3 SCREWS replace X 3 STACERS replace X 3 SWITCH, ROTARY inspect X 3 SWITCH, ROTARY replace X 3 TERMINAL LUGS replace X 3 WIRE replace X 3			+ v	+	+	+	+		
RESISTOR Lest replace X 2 X SCREWS replace X 3 SPACERS replace X 3 SWITCH, PLSH inspect replace X 3 SWITCH, ROTARY inspect replace X 3 TERMINAL LUGS replace X 3 TREMINAL LUGS replace X 3 WIRE replace X 1	POST, BINDING	1 -	1 î		1 x			3	
RESISTOR Testace X 3 SCREWS replace X 3 Included in Maintenance Kit SPACERS replace X 3 Not stocked, fabricate SWITCH, PUSH inspect X 3 SWITCH, ROTARY inspect X 3 TERMINAL LUGS replace X 3 WIRE replace X 3		· · · · · · · · · · · · · · · · · · ·	+		$+\hat{-}$	+ x	+-		
SCREWS replace X 3 Included in Maintenance Kit SPACERS replace X 3 Not stocked, fabricate SWITCH, PUSH inspect X 3 replace X 3 SWITCH, ROTARY inspect X 3 TERMINAL LUGS replace X 3 TERMINAL LUGS replace X 3	RESISTOR								
SCREWS Teplace X 3 Not stocked, fabricate SPACERS inspect X 3 SWITCH, PUSH inspect X 3 SWITCH, ROTARY inspect X 3 TERMINAL LUGS replace X 3 WIRE replace X 3			1		+ <u>x</u>	+		A second se	Included in Maintenance Kit
SPACERS Toplace X 3 SWITCH, PUSH inspect replace X 3 SWITCH, ROTARY inspect replace X 3 TERMINAL LUGS replace X 3 WIRE replace X 1ncluded in Maintenance Kit			+	+	+	x			Not stocked, fabricate
Switch, rosh replace X 3 Switch, RotARY inspect replace X X 3 TERMINAL LUCS replace X 3 Included in Maintenance Kit WIRE replace X X 1			+	+	+ x	+	+		
SWITCH, ROTARY inspect replace X 3 TERMINAL LUGS replace X 3 WIRE replace X 3	SWITCH, PUSH							3	
Switch, Rolant replace X 3 TERMINAL LUGS replace X 3 WIRE replace X Included in Maintenance Kit			+		1	+			
TERMINAL LUGS replace X 3 Included in Maintenance Kit WIRE replace X Included in Maintenance Kit	SWITCH, RUTARI	1				x		3	
Itemminate Loos Included in Maintenance Kit WIRE replace X			-+		+ x		+		Included in Maintenance Kit
				+	1	+ x			Included in Maintenance Kit
	e e e e e								
		1							
	е		·	27 F				l	
	 A state of the sta	· · · · · · · · · · · · · · · · · · ·							
								1	and the second
	$(1,1,\dots,N_{n}) = \sum_{i=1}^{n} (1,1,\dots,N_{n}) = \sum_{i=1}^{n} (1,1,\dots,N_{n})$								
	M-4A/U; ZM-4B/U				7	-			

ALLOCATION OF TOOLS FOR MAINTENANCE FUNCTIONS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	1 #		3rd			REPAIR	
FACILITIES REQUIRED FOR MAINTENANCE OPERATIONS	1					FACIL- ITIES CODE	REMARKS
ZM-4A/U; ZM-4B/U							
ECADE BOX TS-679/U				+	+	1	Second level of maintenance is performed at third
ULTIMETER ME-77/U				+	+	2	Second level of maintenance is performed at third
DOL EQUIPMENT TK-21/G			+	+	+	3	Second level of maintenance is performed at third
					[
						1.	
•							
i .							
		ļ					
							1

ZM-4A/U; ZM-4B/U

•

:

8

By Order of Wilber M. Brucker, Secretary of the Army:

MAXWELL D. TAYLOR, General, United States Army, Chief of Staff.

Official:

R. V. LEE, Major General, United States Army, The Adjutant General.

Dietribution

Actino Army:

484 (2) "NGR [1] Technical Stf. DA 1 except CSigO [30] USCONARC (5) I'SA Arty Rd (1) IISA Armor Rd (1) ITSA Inf Rd (1) IISA Air Def Rd (1) IISA Ahn & Flot Rd (1) IISA Awn Rd (1) USA Armor Bd Test Sec (1) USA Air Def Bd Test Sec (1) USA ATR (1) US ARADCOM (2) IIS ARADCOM Ren (2) OS Mai Comd (5) OS Race Comd (5) Log Cond (5) USA Ord Mel Comd (3) MDW (1) Armies (5) except First US Armv (7)Corps (2) Div (2) Sur Colleges (5) R. Sur Set (5' except LISASCS (25) Ger Depot (2' except Atlants Cer Depot (Sis Sec Ger Debot (Sic Depot: (17) William Reaumon AF (5 Fitzsimmon AF (5 WRAMC (1 USATC (1 Engi Main Cer (1 Arm Pictoria Cer (2 Por a Fml (OS (2 Tran Termina Come (1 Arm Terminal (1 Of Sui Agei (2 NC Stat. Af (3 IISAR None

+Id Lomd, Det Atomic spt Agey 5) JSA Jomm Agey (2) JSA Sig Engr Agey JSA Sig Eqp Spt Agey (Z) USA Sig Msl Spt Agey [13] USA Sig Pubs Agey (8) ΓASSA (15) Midwestern Rgn Dtc [1ASSA] [1] Benicia Arsenal (5) Fran Arsenal (5) Pine Bluff Arsenal (5) Raritan Arsenal (5) Redstone Arsenal (5) Yuma Test Sta (2) Dugway PG (1) USA Elct PG (1) AFIP (1) AMS (1) Sig Fld Maint Shops (3) USA Med Rsch Lab (5) Sig Lab (5) USASig Sv Team (1) Mil Dist (1) USA Corps (Res) (1) Sector Comd, USA Corps ((1) JBUSMC (2) Units org under to TOE: 11-155 121 6 10° (2)

6-100 (2)	11-15. (2)
6-125 (2)	11-157 (2)
6-126 (2)	11-158 (2)
6-300 (2)	11-500 AA-AE (2
6-315 (2)	11-587 (2)
6-31((2	11-592 (2)
6-57! (2	11-59/ (2
6-577 (2)	44-14: (2
11-7 (2	44-147 (2
11-16 (2	44-44: (2
11-2! (2)	44-44, (2
11-2; (2	44-44? (2
11-4 (2	44-53: (2
11-4 (2	44-537 (2
11-5 (2	44-54! (2
11-9 (2	44-54, (2
11-11 (2	

Fo explanation appreviation used se AT 320-50

PIN: 018865-001