

TECHNICAL MANUAL }  
 TM 9-1290-347-34P }

HEADQUARTERS  
 DEPARTMENT OF THE ARMY  
 WASHINGTON, D.C., 6 Oct 1971

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE  
 REPAIR PARTS AND SPECIAL TOOLS LIST (INCLUDING  
 DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)  
 FOR  
 POST, AIMING: M1A2  
 (1290-535-7617)

Current as of 30 September 1971

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This manual supersedes that portion of ORD 8 F34 pertaining to Post, Aiming M1A2 including all changes.

## Section I. INTRODUCTION

### 1. Scope.

This manual lists repair parts, special tools, and support equipment required for the performance of direct support, general support and depot maintenance of the aiming post, M1A2.

### 2. General.

This Repair Parts and Special Tools List is divided into the following sections:

*a. Repair Parts List-Section II.* A list of repair parts authorized at the direct support, general support, and depot levels for the performance of maintenance. This list also includes parts which must be removed for the replacement of the authorized parts. Parts lists are composed of functional groups in ascending numerical sequence, with parts in each group listed in figure and item number sequence.

*b. Special Tools List-Section III.* A list of special tools, test and support equipment authorized for the performance of maintenance at the direct support, general support and depot levels.

*c. Federal Stock Number and Reference Number Index-Section IV.* A list, in ascending numerical sequence, of all Federal stock numbers appearing in the listings followed by a list, in alphameric sequence, of all reference numbers appearing in the listings. Federal stock number and reference numbers are cross-referenced to each illustration figure and item number appearance.

### 3. Explanation of Columns.

The following provides an explanation of columns found in the tabular listings.

*a. Source, Maintenance, and Recoverability Codes (SMR).*

(1) *Source Code.* Indicates the source for the listed items. Source codes are:

<i>Code</i>	<i>Explanation</i>
P	Repair parts, special tools, and test equipment supplied from the GSA/DSA or Army supply system, and authorized for use at indicated maintenance categories.
P2	Repair parts, special tools, and test equipment which are procured and stocked for insurance purposes because the combat or military essentiality of the end item dictates that a minimum quantity be available in the supply system.
P9	Assigned to items which are NSA design controlled: unique repair parts, special tools, test, measuring and diagnostic equipment, which are stocked and supplied by the Army COMSEC Logistic

<i>Code</i>	<i>Explanation</i>
	System and which are not subject to the provisions of AR 380-41.
P10	Assigned to items which are NSA design controlled: special tools, test, measuring and diagnostic equipment for COMSEC support which are accountable under the provisions of AR 380-41, and which are stocked and supplied by the Army COMSEC Logistic System.
M	Repair parts, special tools and test equipment which are not procured or stocked as such in the supply system but are to be manufactured at indicated maintenance levels.
A	Assemblies which are not procured or stocked as such but are made up of two or more units. Such component units carry individual stock numbers and descriptions, are procured and stocked separately, and can be assembled to form the required assembly at indicated maintenance categories.
X	Parts and assemblies that are not procured or stocked because the failure rate is normally below that of the applicable end item or component. The failure of such part or assembly should result in retirement of the end item from the supply system.
X1	Repair parts which are not procured or stocked. The requirement for such items will be filled by the next higher assembly or component.
X2	Repair parts, special tools and test equipment which are not stocked and have no foreseen mortality. The indicated maintenance category requiring such repair parts will attempt to obtain the parts through cannibalization or salvage. The item may be requisitioned, with exception data, from the end item manager for immediate use.
G	Major assemblies that are procured with PEMA funds for initial issue only as exchange assemblies at DS and GS level. These assemblies will not be stocked above DS and GS level or returned to depot supply level.

*Note.* Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded X1 and aircraft support items as restricted by AR 700-42.

(2) *Maintenance Code.* Indicates the lowest category of maintenance authorized to install the repair part and/or use the special tool or test equipment for each application. Capabilities of higher maintenance categories are considered equal or better. Maintenance codes are:

<i>Code</i>	<i>Explanation</i>
C _____	Crew/operator
O _____	Organizational maintenance
F _____	Direct support maintenance
H _____	General support maintenance
D _____	Depot maintenance

(3) *Recoverability Code.* Indicates whether unserviceable items should be returned for recovery or salvage. Items not coded are nonrecoverable. Recoverability codes are:

Code	Explanation	f. 30-Day DS/GS Maintenance Allowances.
R-	Repair parts (assemblies and components), special tools and test equipment which are considered economically repairable at direct and general support maintenance levels. When the item is no longer economically repairable, it is normally disposed of at the GS level. When supply considerations dictate, some of these repair parts may be listed for automatic return to supply for depot level repair as set forth in AR 710-50. When so listed, they will be replaced by supply on an exchange basis.	<i>Note.</i> Allowances in GS Column are for GS Maintenance only.
S-	Repair parts, special tools and test equipment, and assemblies which are economically repairable at DS and GS activities and which normally are furnished by supply on an exchange basis. When items are determined by a GSU to be uneconomically repairable, they will be evacuated to a depot for evaluation and analysis before final disposition.	(1) The allowance columns are divided into three subcolumns. Indicated in each subcolumn, opposite the first appearance of each item in each category of maintenance, is the total quantity of items authorized for the number of equipments supported. Subsequent appearances of the same item will have the letters "REF" in the applicable allowance columns, indicating total allowance quantities will be shown with the first appearance of the item when shown as a supply item. Items authorized for use as required but not for initial stockage are identified with an asterisk in the allowance column.
T-	High dollar value recoverable repair parts, special tools and test equipment which are subject to special handling and are issued on an exchange basis. Such items will be repaired or overhauled at depot maintenance activities only. No repair may be accomplished at lower levels.	(2) The quantitative allowances for DS/GS levels of maintenance will represent initial stockage for a 30-day period for the number of equipments supported.
U-	Repair parts, special tool and test equipment specifically selected for salvage by reclamation units because of precious metal content, critical materials, high dollar value, or reusable casings or castings.	(3) Determination of the total quantity of parts required for maintenance of more than 100 of these equipments can be accomplished by converting the equipment quantity to a decimal factor by placing a decimal point before the next to last digit of the number to indicate hundredths and multiplying the decimal factor by the parts quantity authorized in the 51-100 allowance column. <i>Example.</i> authorized allowance for 51-100 equipments is 40; for 150 equipments multiply 40 by 1.50 indicating 60 parts required.
<i>b. Federal Stock Number.</i> Indicates the Federal stock number assigned to the item and will be used for requisitioning purposes.		
<i>c. Description.</i> Indicates the Federal item name and a minimum description required to identify the item. The last line indicates the reference number followed by the applicable Federal Supply Code for Manufacturer (FSCM) in parentheses. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government Agency, etc., and is identified in SB 708-42.		
<i>d. Unit of Measure (U/M).</i> Indicates the standard or basic quantity by which the listed item is used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation, e.g., ea, in, pr, etc., and is the basis used to indicate quantities and allowances in subsequent columns. When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.		
<i>e. Quantity Incorporated in Unit.</i> Indicates the quantity of the item used in the breakout shown in the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable, e.g., shims, spacers, etc.		
		<i>g. 1-Year Allowances Per 100 Equipments/Contingency Planning Purposes.</i> This column indicates opposite the first appearance of each item the total quantity required for distribution and contingency planning purposes. Subsequent appearances of the same item will have the letters "REF" in this column when shown as a supply item. The range of items indicates total quantities of all authorized items required to provide for adequate support of 100 equipments for one year.
		<i>h. Depot Maintenance Allowance Per 100 Equipments.</i> This column indicates opposite the first appearance of each item the total quantity authorized for depot maintenance of 100 equipments. Subsequent appearances of the same item will have the letters "REF" in this column when shown as a supply item. Items authorized for use but not for initial stockage are identified with an asterisk in the allowance column.
		<i>i. Illustration.</i> This column is divided as follows:
		(1) <i>Figure Number.</i> Indicates the figure number of the illustration on which the item is shown.

(2) Item Number. Indicates the callout number used to reference the item on the illustration.

#### 4. Special Information.

a. Action change codes indicated in the left-hand margin of the listing page denote the following:

N-Indicates an added item.

C-Indicates a change in data.

R-Indicates a change in FSN only.

b. The following publications pertain to aiming post, M1A2.

TM 9-1015-200-20P	Organizational Maintenance Repair Parts and Special Tools List for Mortar, 81-mm Cannon M29 and M29A1 (M29E1) (1015-722-5535) W/Mount M23, M23A1 and M23A2.	TM 9-1055-215-12	Operator and Organizational Maintenance Manual: 155mm Multiple Rocket Launcher M91.
TM 9-1015-203-20P	Organizational maintenance repair parts and special tools list for: Howitzer, Light Towed: 105mm M101 (1015-322-9728) and M101A1 (1015-322-9752).	TM 9-1055-215 20P	Organizational Maintenance Repair Parts and Special Tool Lists 115mm Multiple Rocket Launcher M91.
TM 9-1015-215-12	Operator and Organizational Maintenance Manual: Mortar 4.2 in (Cannon M30 on Mount M24 or M24A1) and Mortar, Sub Caliber 60-mm M31.	TM 9-2300-203-12	Operator and Organizational Maintenance Manual: Carrier, Personnel: Full Tracked Armored M59 (2320-834-0039) and Mortar Infantry Self-Propelled: 4.2 in M84 (2350-348-8593).
TM 9-1015-215-20P	Organizational Maintenance Repair Parts and Special Tools List for: Mortar 4.2 inch Cannon M30 on Mount M24 (1015-322-9720) or M24A1 (1015-840-1840) and Mortar, Sub Caliber, 60 millimeter M31.	TM 9-2300-203-20P	Organizational Maintenance Repair Parts and Special Tools for Carrier Personnel, Full Tracked: Armored M59 and Mortar Self-Propelled Full Tracked 4.2 inch M84.
TM 9-1015-234-12	Operator and Organizational Maintenance Manual: (Including Repair Parts and Special Tool Lists) Howitzer, Light Towed: 105mm M102 (1015-086-8164).	TM 9-2300-216-10	Operators' Manual Gun Field Artillery, Self-Propelled 175mm M107 (2350-436-6635) and Howitzer Heavy Self-Propelled 8-inch M110 (2350-439-6243).
TM 9-1025-200-12	Operator and Organizational Maintenance Manual: Howitzer, Medium, Towed 155mm M114 and M114A1; and Howitzer, Medium Towed: Auxiliary Propelled 155mm M123A1.	TM 9 2300-216-20P	Organizational Maintenance Repair Parts and Special Tool Lists, Gun Field Artillery, Self-Propelled 175mm, M107 (2350-436-6635) and Howitzer, Heavy Self-Propelled 8-inch M110 (2350-439-6243).
TM 9-1025-200-20P	Organizational Maintenance Repair Parts and Special Tools Lists for: Howitzer, Medium, Towed 155mm, M114 and M114A1: and Howitzer, Medium, Towed Auxillary Propelled 155mm, M123A1.	TM 9-2300-224-10	Operator's Manual Carrier Personnel, Full Tracked, Armored, M113 (2320-629-1294) Carrier, Guided Missile Equipment: XM74E2 (1450-831-6942): Carrier Command Post Light Tracked M577 (2320-856-6624) Carrier Flame Thrower Self-Propelled: M132 (2350-987-8900) Carrier Mortar, 107mm Self-Propelled M106 (2350-860-2350).
TM 9-1030-203-20P	Organizational Maintenance Repair Parts and Special Tools List, 8-inch Towed Heavy Howitzer (8413765).	TM 9-2300-224-20P/3	Organizational Maintenance Repair Parts and Special Tools List for: Part One, Carrier Personnel, Full Tracked Armor, M113 (gasoline) (2320-629-1294) : Part two Carrier Command Post: Light Tracked M577 (gasoline) (2320-856-6624) Part three Carrier Mortar, 107mm Self-Propelled: 106 (gasoline) (2350-860-2350) Part Four Flame Thrower, Self-Propelled: M132 (gasoline) (2350-987-8900) Part Five Carrier Guided Missile Equipment XM474E2 (gasoline) (1450-831-6942).
		TM 9-2350-203-20P	Organizational Maintenance Repair Parts and Special Tool

	Lists for Howitzer, Self-Propelled, Full Tracked 155mm, M44 and M44A1.
TM 9-2350-209-20P	Organizational Maintenance Repair Parts and Special Tool Lists for Howitzer, Light, Self-Propelled Full Tracked 105mm M52 (2350 733-3216) and M52A1 (2350-563-7976).
TM 9-2350-210-12	Operator and Organizational Maintenance Howitzer, Heavy Self-Propelled: Full Tracked, 8-inch, M55 (2350-793-3841).
TM 9-2350-210-20P	Organizational Maintenance Repair Parts and Special Tool Lists for Gun, Field Artillery Self-Propelled: 155mm M53 (T97) (2350-739-3840) and Howitzer, Heavy Self-Propelled Full Tracked, 8-inch M55 (T108) (2350-739-3841).
TM 9-2350-217-10	Operators' Manual: Howitzer Light Self-Propelled, 105mm M108 (2350-440-8810) and Howitzer Medium Self-Propelled 155mm M109 (2350-440-8811).
TM 9-2350-217-25P/2	Operational DS and GS and Depot Maintenance Repair Parts and Special Tool Lists Cab and Miscellaneous Components Howitzer Medium self-Propelled: 155mm M109 (2350-440-8811).

## 5. How to Locate Repair Parts.

a. When Federal stock number or reference number is unknown:

(1) *First*. Using the table of contents determine the functional group within which the repair part belongs, i.e., engine, engine assembly, transmission, transmission assembly. This is necessary since illustrations are prepared for functional groups, and listings are divided into the same groups.

(2) *Second*. Find the illustration covering the functional group to which the repair part belongs.

(3) *Third*. Identify the repair part on the illustration and note the illustration figure and item number of the repair part.

(4) *Fourth*. Using the Repair Parts Listing, find the functional group to which the repair part belongs and locate the illustration figure and item number noted on the illustration.

b. When Federal stock number or reference number is known:

(1) *First*. Using the index of Federal Stock Numbers and Reference Numbers find the pertinent Federal stock number or reference number. This index is in ascending FSN sequence followed by a list of reference numbers in ascending alphabetic sequence, cross-referenced to the illustration figure number and item number.

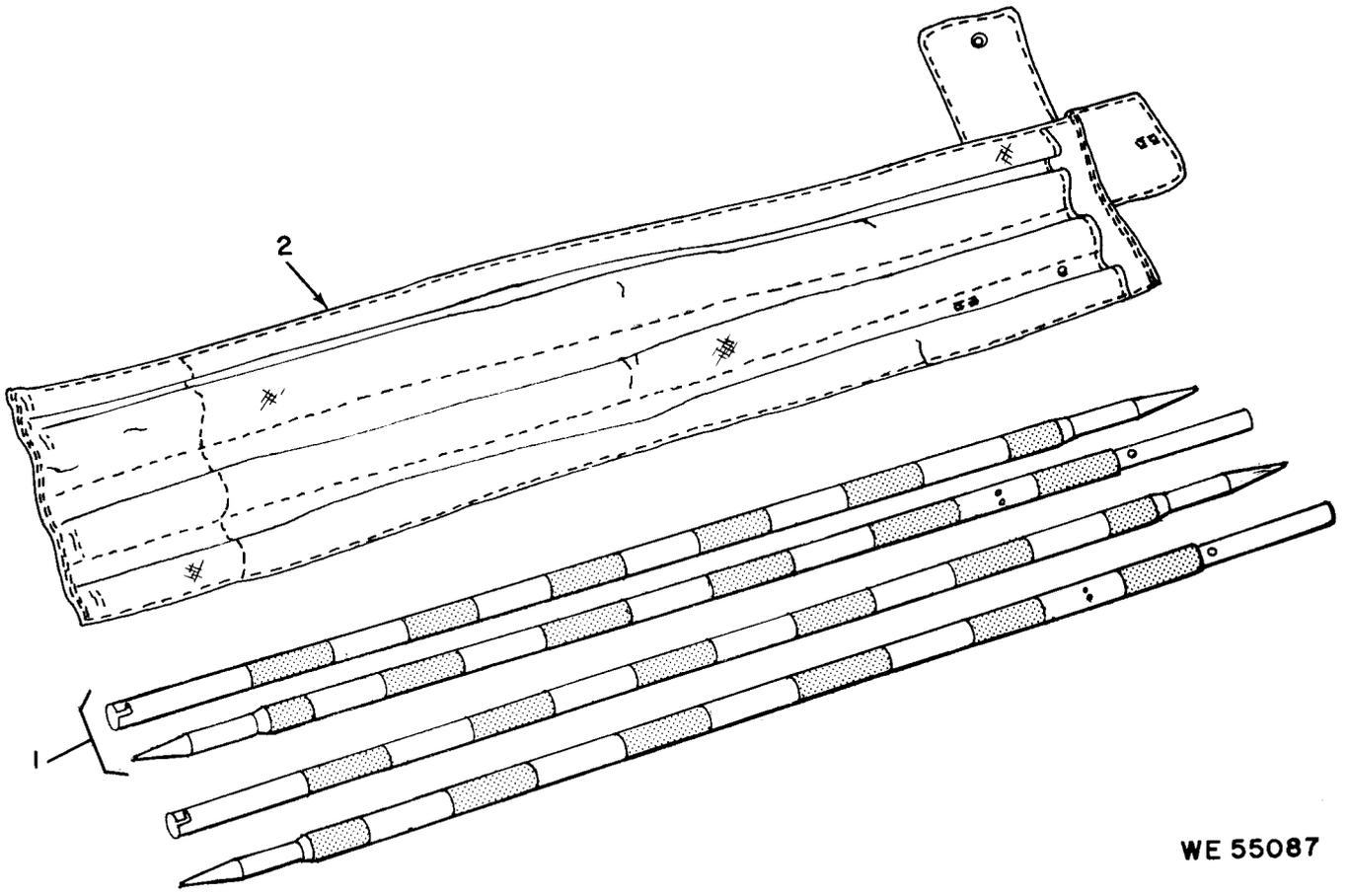
(2) *Second*. Using the Repair Parts Listing, find the functional group of the repair part and the illustration figure number and item number referenced in the Index of Federal Stock Numbers and Reference Numbers.

## 6. Abbreviations.

<i>Abbreviations</i>	<i>Explanation</i>
b	base
cres	corrosion resistant steel
cskh	countersunk head
ctg	cutting
dia	diameter
fnsh	finish
l	long
no	number
pnh	pan head
psvt	passivated
scr	screw
sm	small
spcl	special
stl	steel
thd	thread
unc	unified coarse thread
w	wide

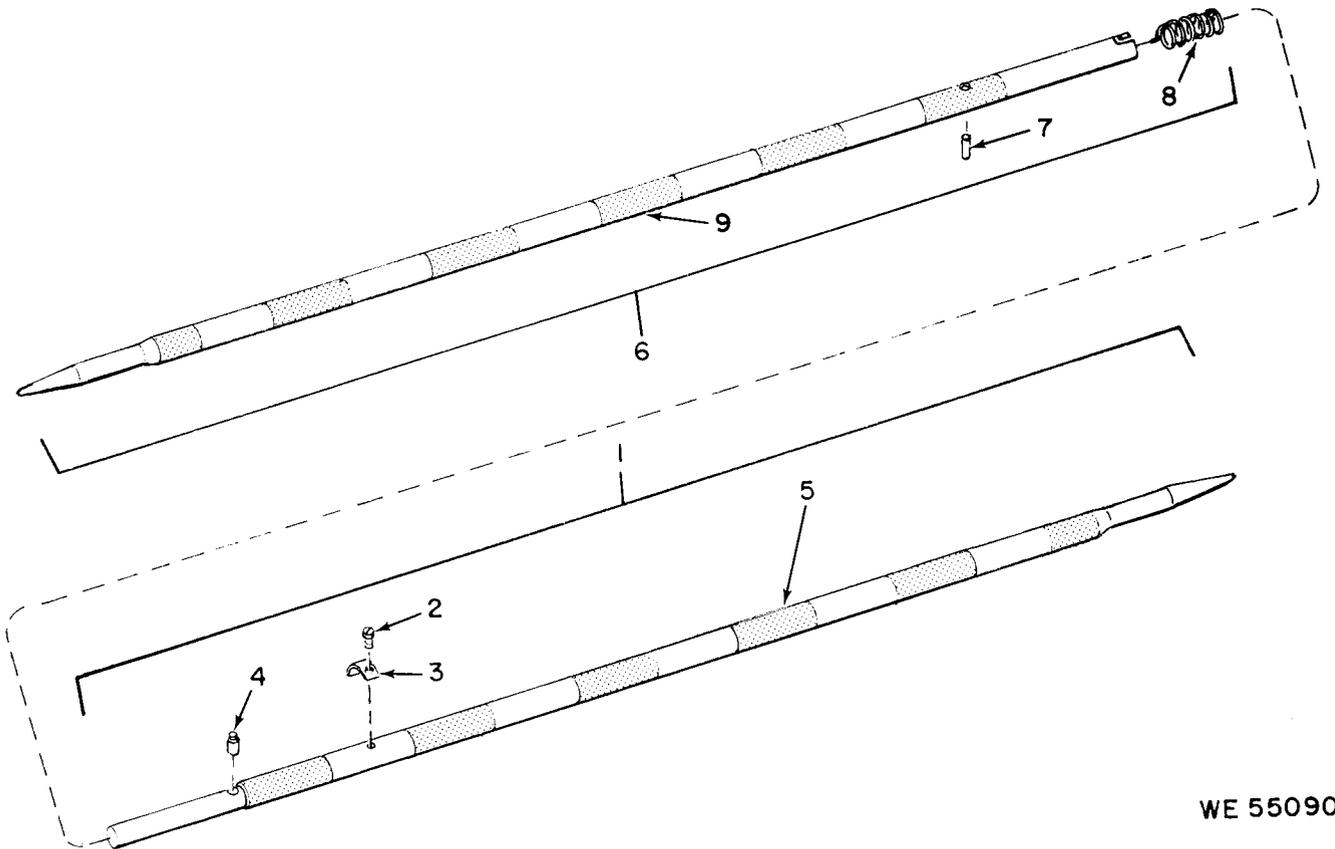
## 7. Recommendations for Maintenance Publications Improvements.

You can improve this manual by calling attention to errors and by recommending improvements, using DA Form 2028 (Recommended Changes to Publications) or by a letter, and mailing directly to Commanding Officer, Frankford Arsenal, ATTN: AMSWE-MAF-W3100, Philadelphia, Pennsylvania 19137. A reply will be furnished directly to you.



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Figure 1. Aiming post M1A2



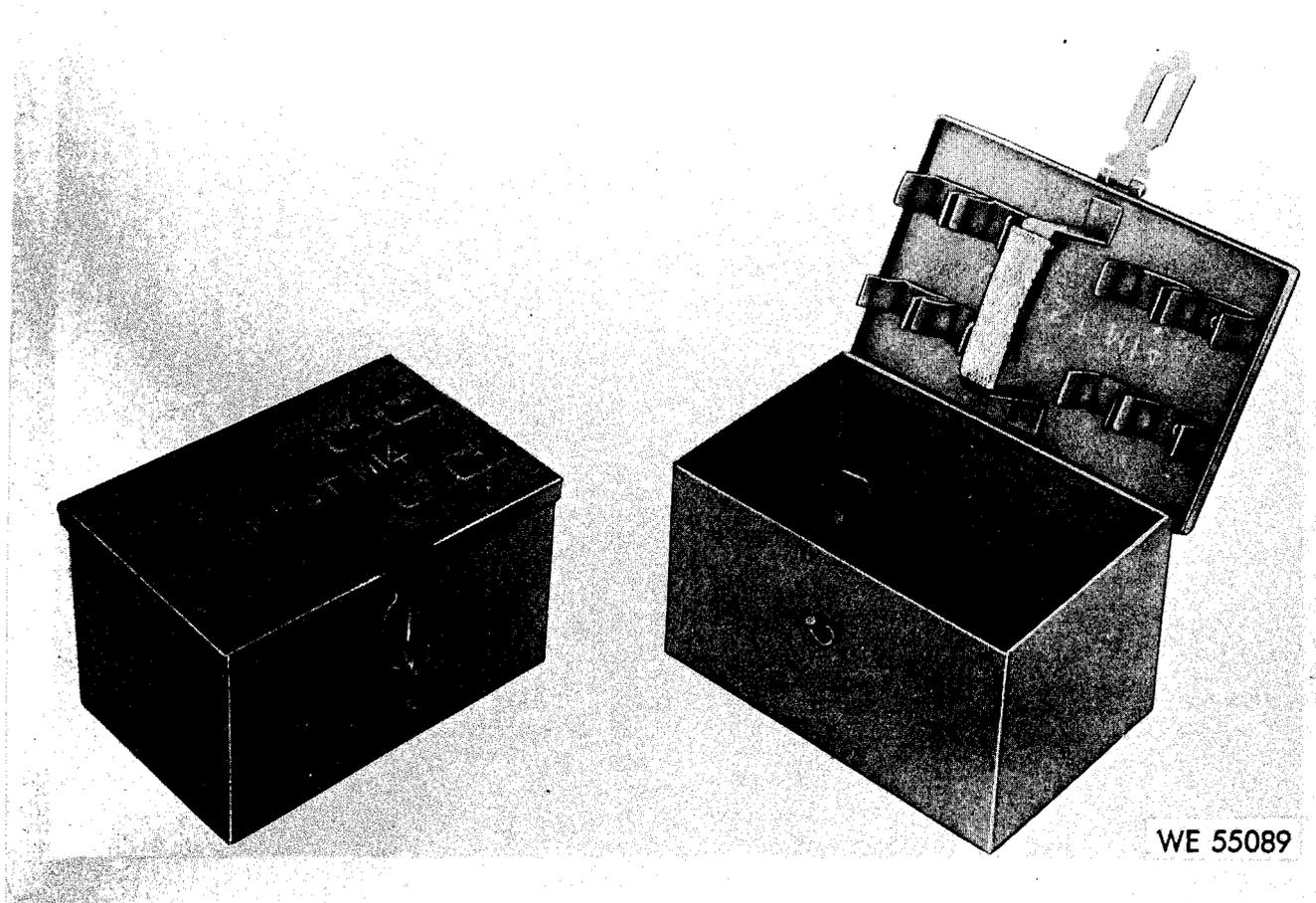
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Figure 2. Aiming post M1A2

## SECTION II. REPAIR PARTS LIST

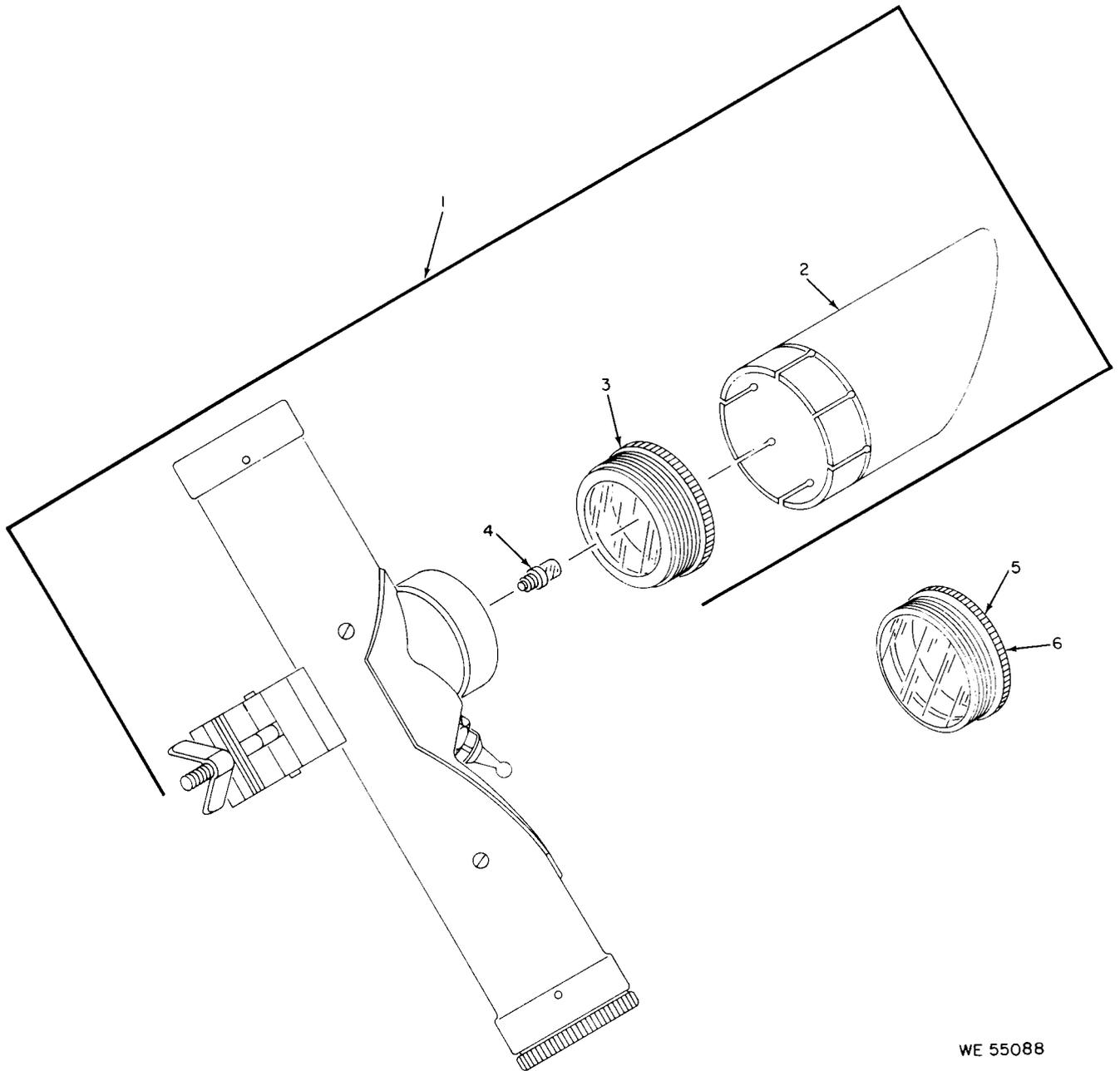
ACT ON CODE	(1) SOURCE MAINT AND REC'D CODE			(2) FEDERAL STOCK NO.	(3) DESCRIPTION	(4) UNIT OF MEAS	(5) QTY INC IN	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1-YR ALW PER 100 EQUIP CNTGCT	(9) DEPOT ALW PER 100 EQUIP	(10) ILLUSTRATION	
	(A)	(B)	(C)					(A)	(B)	(C)	(A)	(B)	(A)			(B)	
	SOURCE	MAINT	REC'D					1-20	21-50	51-100	1-20	21-50	51-100			FIGURE NO.	ITEM NO.
					AIMING POST M1A2, 7687114												
N	X--				TUBE		1									2	1
N	P-D-			5305-753-7171	SCREW, TAPPING THD CTG, FNH, CRES, PSVT FNH, NO 4-40-UNC-2A, 1/4 L MS24630-10 (96906)	EA	2							*		2	2
C	P-D-			9905-346-7628	PLATE IDENTIFICATION 8227020 (00000)	EA	1							*		2	3
N	P-D-				PIN 7651235 (19200)	EA	1							*		2	4
N	X--				TUBE		1									2	5
N	X--				TUBE		1									2	6
N	P-F-			5320-491-1752	RIVET, SOLID SM, CSKH, STL, 1/8 DIA, 1 3/8 L MS35744-12 (96906)	EA	1	*	*	*	*	*	*	*	*	2	7
N	P-F-			5340-200-6922	SPRING, HELICAL, COMPRESSION 7651233 (19200)	EA	1	*	*	*	*	*	*	*	*	2	8
N	X--				TUBE		1									2	9

SECTION III. SPECIAL TOOLS LIST															
(1)	(2)	(3)	(4)	(5)	(6)			(7)			(8)	(9)	(10)		
ACT SOURCE	FEDERAL	DESCRIPTION	UNIT	QTY	30-DAY DS MAINT ALLOWANCE			30-DAY GS MAINT ALLOWANCE			1-YR	DEPOT	ILLUSTRATION		
ON MAINT AND	STOCK		OF	INC							ALW PER	MAINT	(A)	(B)	
CODE	NO.		MEAS	IN	(A)	(B)	(C)	(A)	(B)	(C)	100	100	FIGURE	ITEM	
(A)	(B)	(C)			35450	21-50	51-100	35450	21-50	51-100	CNTGCV	EQUIP	NO.	NO.	
SOURCE	MAINT	RECOV			REFERENCE NUMBER & MFR CODE										
TOOLS AND EQUIPMENT															
EQUIPMENT															
C	P-C-	1240-654-6089											*	3	
					CHEST, LIGHT, M14 6546089 (19200)										
C	P-C-	1290-535-7629	EA	*	*	*	*	*	*	*	*	*	*	4	
				LIGHT, AIMING POST, M14 (W/FILTERS, RED AND GREEN) 7197188 (19200)											
C	P-C-	1290-653-7993	EA	*	*	*	*	*	*	*	*	*	*	1	2
				COVER, AIMING POST, M401 6537993 (19200)											
C	P-C-	1290-654-5472	EA	*	*	*	*	*	*	*	*	*	*	5	
				CHEST, LIGHT, M21 6545472 (19200)											



*Figure 3. Chest, light M14*

ACT ON CODE	(1) SOURCE MAINT AND RECOV CODE (A) (B) (C) SOURCE MAINT RECOV			(2) FEDERAL STOCK NO.	(3) DESCRIPTION  REFERENCE NUMBER & MFR CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1-YR ALW EQUIP CNTGCTY	(9) DEPOT PER MAINT 100 ALW PER EQUIP	(10) ILLUSTRATION FIGURE (A) (B) NO. ITEM	
	(A)	(B)	(C)					(A)	(B)	(C)	(A)	(B)	(C)			(A)	(B)
	1-20	21-50	51-100					1-20	21-50	51-100	1-20	21-50	51-100			1-20	21-50
REPAIR PARTS FOR EQUIPMENT																	
LIGHT, AIMING POST, M14 7197188																	
N	X1--				LIGHT, AIMING POST, M14 6543977 (19200)		1									4	1
N	X1--				SHADE 6173778 (19200)		1									4	2
N	X1--				WINDOW 6173787 (19200)		1									4	3
N	P-O-		6240-635-9800		LAMP, INCANDESCENT T-11/4 SPSCR B, NO 325 MS51608-3 (96906)	EA	1	*	*	*	*	*	*	*	*	4	4
N	P-O-		1290-617-3781		FILTER CEMENTED (RED) 6173781 (19200)	EA	1	*	*	*	*	*	*	*	*	4	5
N	P-O-		1290-617-3860		FILTER CEMENTED (GREEN) 6173860 (19200)	EA	1	*	*	*	*	*	*	*	*	4	6



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**Figure 4. Light, aiming post M14**



*Figure 5. Chest, light M21*

SECTION IV. FEDERAL STOCK NUMBER AND REFERENCE NUMBER INDEX

STOCK NUMBER	FIGURE NO	ITEM NO	STOCK NUMBER	FIGURE NO	ITEM NO		
1240-654-6089	3		5305-753-7171	2	2		
1290-535-7629	4		5320-491-1752	2	7		
1290-617-3781	4	5	5340-200-6922	2	8		
1290-617-3860	4	6	6240-635-9800	4	4		
1290-653-7993	1	2	9905-346-7628	2	3		
1290-654-5472	5						
REFERENCE NO	MFG CODE	FIGURE NO	ITEM NO	REFERENCE NO	MFG CODE	FIGURE NO	ITEM NO
MS24630-10	96906	2	2	6543977	19200	4	1
MS35744-12	96906	2	7	6545472	19200	5	
MS51608-3	96906	4	4	6546089	19200	3	
6173778	19200	4	2	7197188	19200	4	
6173781	19200	4	5	7651233	19200	2	8
6173787	19200	4	3	7651235	19200	2	4
6173860	19200	4	6	8227020	00000	2	3
6537993	19200	1	2				

By Order of the Secretary of the Army:

Official:

VERNE L. BOWERS,  
*Major General, United States Army,  
The Adjutant General.*

W. C. WESTMORELAND,  
*General, United States Army,  
Chief of Staff.*

Distribution:

To be distributed in accordance with DA Form 12-41 (qty rqr Block #82), Direct/General Support requirements for Post Aiming.



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 PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

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

# THE METRIC SYSTEM AND EQUIVALENTS

## WEIGHT MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches  
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches  
 1 Kilometer = 1000 Meters = 0.621 Miles

## WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces  
 1 Kilogram = 1000 Grams = 2.2 lb.  
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

## LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces  
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

## SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches  
 1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet  
 1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

## CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches  
 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

## TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$   
 212° Fahrenheit is equivalent to 100° Celsius  
 90° Fahrenheit is equivalent to 32.2° Celsius  
 32° Fahrenheit is equivalent to 0° Celsius  
 $9/5^{\circ}\text{C} + 32 = ^{\circ}\text{F}$

## APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
its	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
ers	Gallons	0.264
ms	Ounces	0.035
ograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
ometers per Liter	Miles per Gallon	2.354
ometers per Hour	Miles per Hour	0.621

