

TECHNICAL MANUAL }  
TM 9-1240-297-34P }

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

MOUNT, TELESCOPE: M110

(1240-788-1234)

Current as of 30 September 1971

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\*This manual supersedes TM 9-1240-297-35P dated 31 July 1961 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 telescope mount, M110.

### 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

<i>Code</i>	<i>Explanation</i>
P10	COMSEC Logistic System and which are not subject to the provisions of AR 380-41. 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 recov-

ery or salvage. Items not coded are nonrecoverable. Recoverability codes are:

Code	Explanation
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.
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.
T	High dollar value recoverable repair parts, special tools and test equipment which are sub 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.
U	Repair parts, special tools 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.

*b. Federal Stock Number.* Indicates the Federal stock number assigned to the item and will be used for requisitioning purposes.

*c. Description.* 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.

*d. Unit of Measure (U/M).* 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.

*e. Quantity Incorporated in Unit.* 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.

*f. 30-Day DS/GS Maintenance Allowances.*

*Note.* Allowances in GS Column are for GS Maintenance only.

(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.

(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.

(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. *Example:* authorized allowance for 51-100 equipments is 40; for 150 equipments multiply 40 by 1.50 indicating 60 parts required.

*g. 1-Year Allowances Per 100 Equipment/Contingency Planning Purposes.* 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.

*h. Depot Maintenance Allowance Per 100 Equipments.* 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. 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.* 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 publication pertains to telescope mount, M110.

TM 9-1015-223-12 Operator and Organizational Maintenance Manual: (Including Repair Parts and Special Tools List): Rifle, Recoilless, 90mm: M67.

c. To maintain disassembly sequence in this manual, a sequence number in parentheses will be displayed immediately to the right of the callout number on the illustration.

#### 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 or subfunction group within which the repair part belongs, i.e., engine, engine assembly, transmission, transmission assembly. This is necessary since illustrations are prepared for functional and subfunctional groups, and listings are divided into the same groups.

(2) *Second.* Find the illustration covering the functional or subfunctional 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 or subfunctional 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 alphameric sequence, cross-referenced to the illustration figure number and item number.

(2) *Second.* Using the Repair Parts Listing, find the functional or subfunctional 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.

Abbreviations	Explanation
b	base
cp	cone point
crs	corrosion resistant steel
dia	diameter
dr	drive
fl	flat
fnsh	finish
h	high
hdls	headless
id	inside diameter
intl	internal
l	long
nf	national fine
no	number
ns	national special
od	outside diameter
pnh	panhead
psvt	passivated
pt	point
rec	recess
s	steel
scdp	steel cadmium plated
skt	socket
t	teeth
thk	thick
unf	unified fine thread

#### 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.

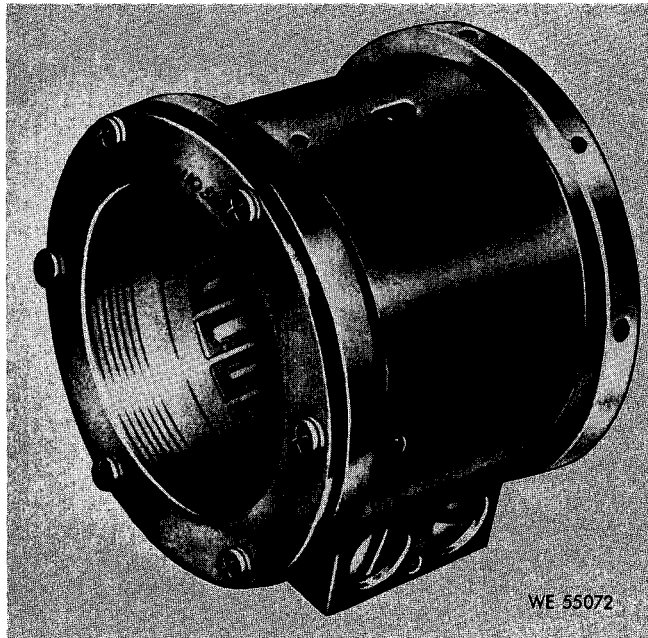
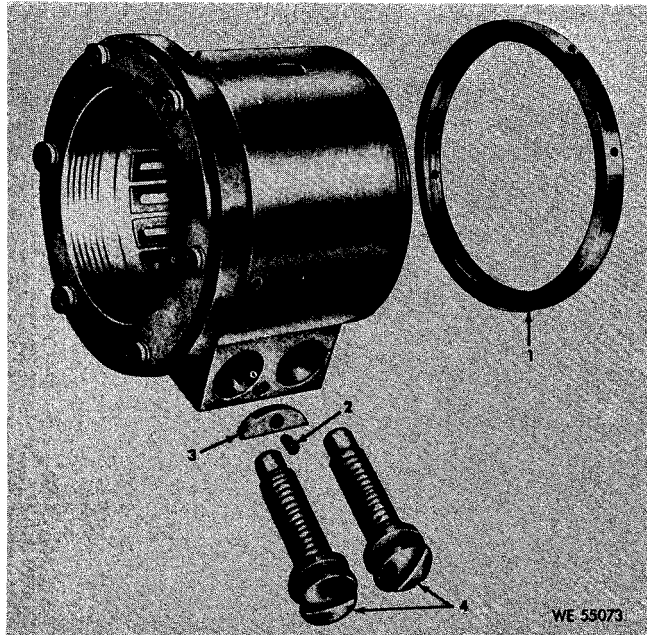


Figure 1. Telescope mount M110.

SECTION II. REPAIR PARTS LIST

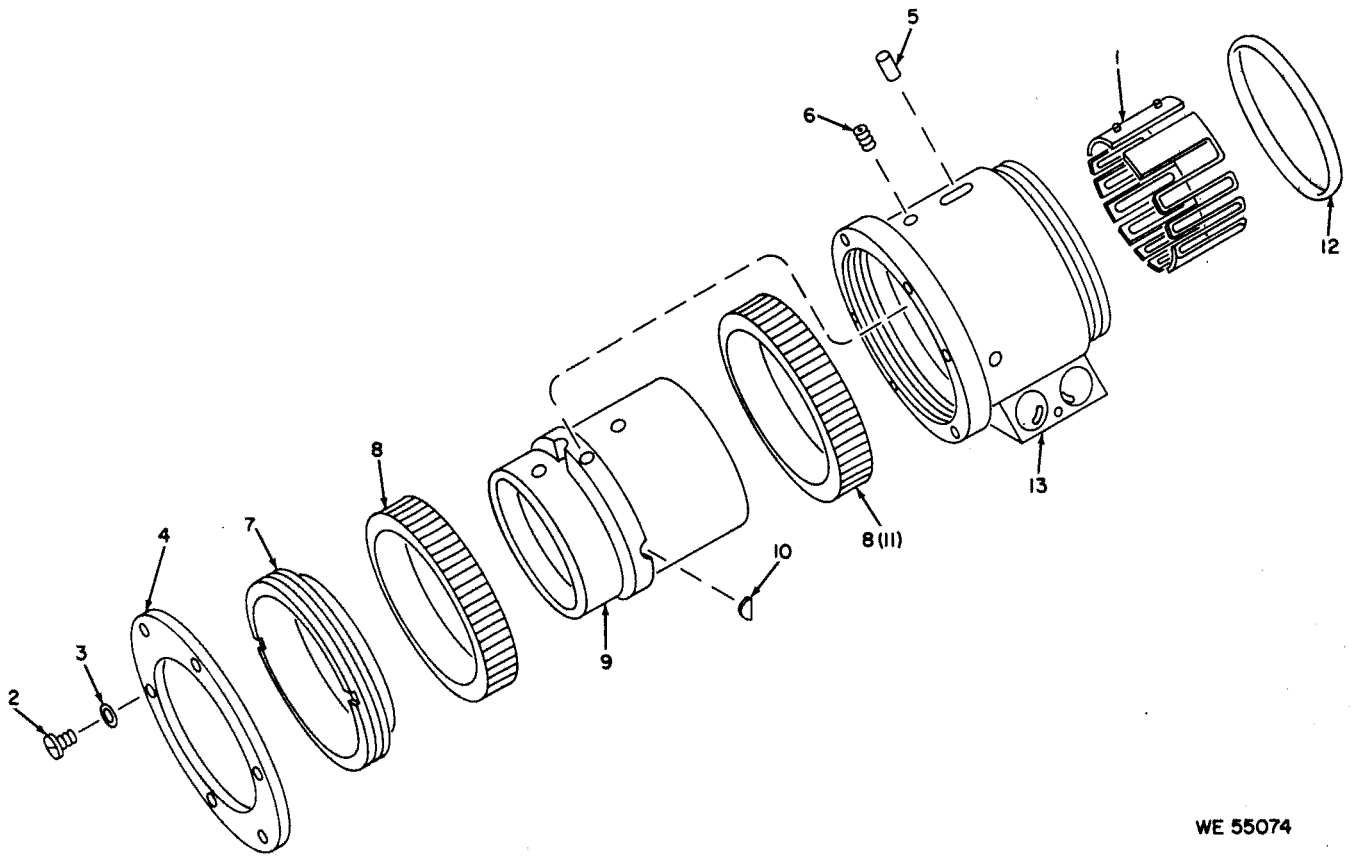
ACT ON CODE	(1) SOURCE MAINT AND RECOV CODE			(2) FEDERAL STOCK NO.	(3) DESCRIPTION	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE			(7) 30-DAY GS MAINT ALLOWANCE			(8) 1-YR ALW PER 100 EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION	
	(A)	(B)	(C)					(A)	(B)	(C)	(A)	(B)	(A)			(B)	
	SOURCE	MAINT	RECOV					1-20	21-50	51-100	1-20	21-50	51-100			NO.	NO.
					MOUNT, TELESCOPE M110 7659765												
C	P-	F-		1240-788-1231	RING ASSEMBLY 1-29/32-32NS-2B, ID, 2.187 OD, 0.187 THK 8634485 (19200)	EA	1	*	*	*	*	*	*	*	*	2	1
C	P-	D-		5305-817-7141	SETSCREW HDLS, SLOT DR, CUP PT, NO 4-48NF- 2A, SCDP 9400803 (21450)	EA	1							*		2	2
C	P-	D-		1240-788-1229	KEY S, 5/8 DIA, 0.094 THK 7659779 (19200)	EA	1							*		2	3
C	P-	D-		1240-788-1233	WORM SHAFTS, S, 0.374 DIA, 1.250 L 7659773 (19200)	EA	2							*		2	4



**Figure 2. Telescope mount M110.**

ACT ON CODE	(1) SOURCE MAINT AND RECOV CODE			(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 PER 100 EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION	
	(A)	(B)	(C)					(A)	(B)	(C)	(A)	(B)	(A)			(B)	
	SOURCE	MAINT	RECOV					1-20	21-50	51-100	1-20	21-50	51-100			FIGUR	ITEM
					HOUSING 7659766 W/RELATED PARTS												
C	P-	F-		1240-869-2355	SPRING ASSEMBLY 7659768 (19200)	EA	1	*	*	*	*	*	*	*		3	1
N	P-	D-		5305-057-0498	SCREW MACHINE PNH, CROSS-REC, CRES, NO2 64UNF- 2A, 3/16L MS51958-2 (96906)	EA	6							*		3	2
C	P-	D-		5310-543-4652	WASHER, LOCK FL, INTL T, CRES, PSVT, FNH, 0.095 ID, 0.200 OD, 0.015 THK MS35333-69 (96906)	EA	6								30	3	3
C	P-	D-		1240-788-0023	RETAINER S, 2.125 OD 7659774 (19200)	EA	1							*		3	4
N	P-	D-		5315-054-4114	PIN, STRAIGHT, HEADLESS 1/8 DIA, 1/32 L 544114 (00000)	EA	1							*		3	5
N	P-	D-		5305-899-5142	SETSCREW HDLS, SKT DR, CP, NO 4-48NF, .125L MS51038-26 (96906)	EA	2							*		3	6
N	P-	D-			RING 7659771 (19200)	EA	1							*		3	7
C	P-	D-		1240-788-1228	GEAR, WEDGE S, 102 T, 1.699 OD, 0.265 THK 7659770 (19200)	EA	2							*		3	8





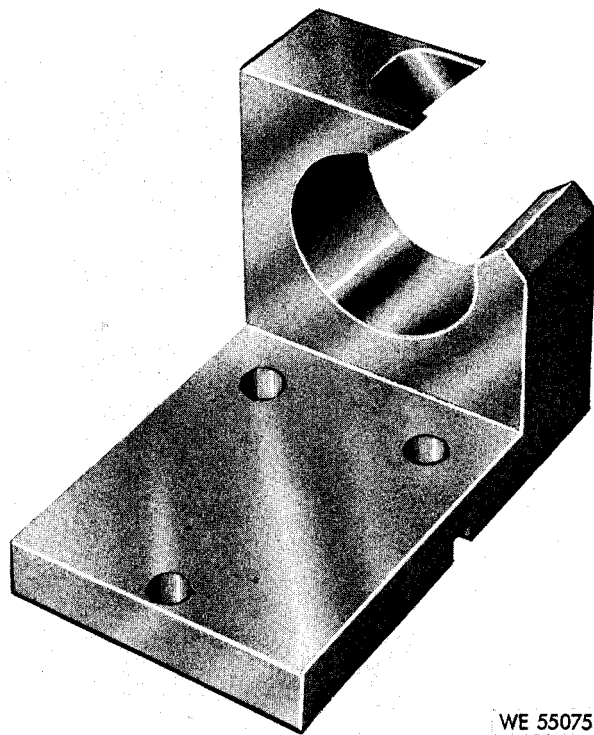
WE 55074

*Figure 3. Housing w/related parts,*

ACT ON CODE	(1) SOURCE MAINT AND RECOV CODE			(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 PER 100 EQUIP CNTGCTY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION	
	(A)	(B)	(C)					(A)	(B)	(C)	(A)	(B)	(C)			(A)	(B)
	SOURCE	MAINT	RECOV					1-20	21-50	51-100	1-20	21-50	51-100			FIGUR	ITEM
N	X2-	D-			TUBE 7659767 (19200)	EA	1									3	9
C	P-	D-		1240-788-1227	SHOE 7659776 (19200)	EA	4							*		3	10
C	P-	D-		5330-599-6697	PACKING, PREFORMED 1.421 ID, 1.56 OD, .139 O/AH 7687317 (19200)	EA	1							*		3	12
N	X-	-			HOUSING		1									3	13

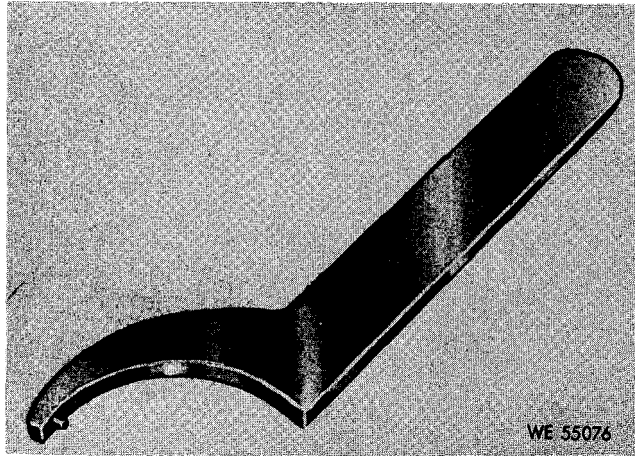
SECTION III. SPECIAL TOOLS LIST

ACT ON CODE	(1) SOURCE MAINT AND RECOV			(2) FEDERAL STOCK NO.	(3) DESCRIPTION	(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 PER 100 EQUIP CNTGCT	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) (B) FIGUR ITEM NO. NO.
	(A) SOURCE	(B) MAINT	(C) RECOV					REFERENCE NUMBER & MFR CODE	USABLE ON CODE	(A) 20-Jan	(B) 21-50	(C) 51-100	(A) 20-Jan	(B) 21-50	(C) 51-100	
TOOLS AND EQUIPMENT																
TOOLS																
C	P-	D-		4931-730-6720	ADAPTER, TEST 8213875 (19200)	EA										4 --
C	P-	O-		5120-893-1736	WRENCH SPANNER 8213920 (19200)	EA	*	*	*	*	*	*	*	*	*	5 --



WE 55075

*Figure 4. Adapter, test.*



*Figure 5. Wrench. spanner.*

SECTION IV. FEDERAL STOCK NUMBER AND REFERENCE NUMBER INDEX

STOCK NUMBER	FIGURE NO.	ITEM NO.	REFERENCE NO.	MFR. CODE	FIGURE NO.	ITEM NO.
1240-788-0023	3	4				
1240-788-1227	3	10	MS35333-69	96906	3	9
1240-788-1228	3	8	MS51038-26	96906	3	6
1240-788-1229	2	3	MS51958-2	96906	3	2
1240-788-1231	2	1	544114	0	3	5
1240-788-1233	2	4	7659768	19200	3	1
1240-869-2355	3	1	7659770	19200	3	8
4931-730-6720	4		7659771	19200	3	7
5120-893-1736	5		7659773	19200	2	4
5305-057-0498	3	2	7659774	19200	3	4
5305-817-7141	2	2	7659776	19200	3	10
5305-899-5142	3	6	7659779	19200	2	3
5310-543-4652	3	3	7687317	19200	3	12
5315-054-4114	3	5	8634485	19200	2	1
5330-599-6697	3	12	9400803	21450	2	2
			7659767	19200	3	3
			8213875	19200	4	
			8213920	19200	5	

By Order of the Secretary of the Army:

Official:

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*The Adjutant General*.

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To be distributed in accordance with DA Form 12-41, (qty rqr block no. 74) Direct and General Support maintenance requirements for Mount Telescope,

