

**TECHNICAL MANUAL**

**ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS**

**VOLTMETER, ELECTRONIC AN/USM-98A  
(NSN 6625-00-753-2115)**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY  
30 SEPTEMBER 1980**



TECHNICAL MANUAL }  
 No. 11-6625-599-20P-1 }

HEADQUARTERS  
 DEPARTMENT OF THE ARMY  
 WASHINGTON, DC, 30 September 1980

**ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS  
 FOR  
 VOLTMETER, ELECTRONIC AN/USM-98A  
 (NSN 6625-00-753-2115)**

*Current as of 4 March 1980*

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In either case, a reply will be furnished direct to you.

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\* This manual supersedes so much of TM 11-6625-559-12, 24 November 1964, as pertains to repair parts and special tools lists.



## SECTION I

### INTRODUCTION

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#### 1. Scope

This manual lists spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of organizational maintenance of AN/USM-98A. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

#### 2. General

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

*a. Section II. Repair Parts List.* A list of spares and repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in numeric sequence, with the parts in each group listed in figure and item number sequence.

*b. Section III. Special Tools List.* Not applicable.

*c. Section IV. National Stock Number and Part Number Index.* A list, in National item identification number (NIIN) sequence, of all National stock numbers (NSN) appearing in the listings, followed by a list, in alphameric sequence, of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

#### 3. Explanation of Columns

*a. Illustration.* This column is divided as follows :

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

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

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

(1) *Source code.* Source codes indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

<i>Code</i>	<i>Definition</i>
PA	Item procured and stocked for anticipated or known usage.

#### NOTE

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

(2) *Maintenance code.* Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code format as follows:

(a) The maintenance code entered in the third position will indicate the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position will indicate one of the following levels of maintenance:

<i>Code</i>	<i>Application/Explanation</i>
O	Support item is removed, replaced, used at the organizational level.

(b) The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). This position will contain one of the following maintenance codes:

<i>Code</i>	<i>Appliation/Explanation</i>
Z	Nonreparable. No repair is authorized.

(3) *Recoverability code.* Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the Uniform SMR Code format as follows:

<i>Recoverability codes</i>	<i>Definition</i>
Z—Nonreparable item.	When unserviceable, condemn and dispose at the level indicated in position 3.

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

*d. Part Number.* Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

**NOTE**

When a stock numbered item is requisitioned, the repair part received may have a different part number than the part being replaced.

*e. Federal Supply Code for Manufacturer (FSCM).* The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.

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

*g. Unit of Measure (U/M).* Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr, etc). 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.

*h. Quantity Incorporated in Unit.* Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly.

**4. Special Information,**

*a.* The following publication pertains to the AN/USM-98A and its components:

TM 11-6625-599-12, Voltmeters, Electronic AN/USM-98A, and AN/USM-98B.

*b.* The illustrations in this manual are identical to those published in TM 11-6625-599-40P-1. Only those parts assigned the third position SMR maintenance code "C" or "O" are listed in the tabular listing; therefore, there may be a break in the item number sequence. Only illustrations containing organizational authorized items appear in this manual.

**5. How to Locate Repair Parts**

*a.* When National stock number or part number is unknown.

(1) *First.* Using the table of contents, determine the functional group within which the item belongs. 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 item belongs.

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

(4) *Fourth.* Using the Repair Parts Listing, find the figure and item number noted on the illustration.

*b.* When National stock number or part number is known.

(1) *First.* Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.

(2) *Second.* After finding the figure and item number, locate the figure and item number in the repair parts list.

**6. Abbreviations**

Not applicable.

(Next printed page is 4)

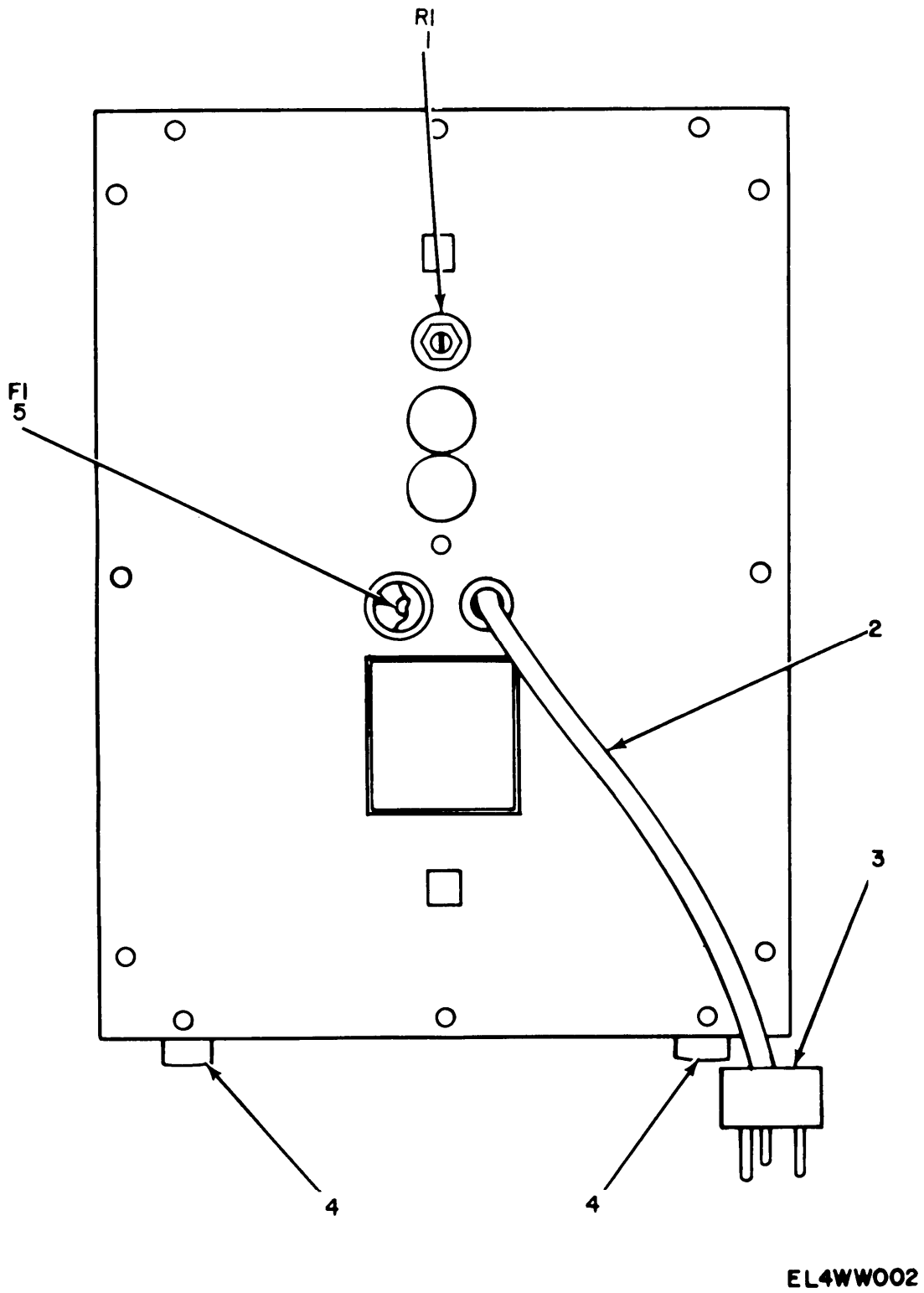


Figure 1. Voltmeter, Electronic ME-161A/U, Rear View.



SECTION II				TM11-6625-599-20P-1					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
ILLUSTRATION									
(A)	(B)	SMR	NATIONAL	PART	DESCRIPTION				
FIG	ITEM	CODE	STOCK	NUMBER	FSCM	USABLE ON CODE	U/M	INC	IN
NO.	NO.		NUMBER					IN	UNIT
					GROUP 01 VOLTMETER, ELECTRONIC, ME-161A/U				
1	5	PAOZZ	5920-00-199-9498	6900-15	28569 FUSE, CARTRIDGE OR			EA	1
1	5	PAOZZ	5920-00-131-9816	10300253	18876 FUSE, CARTRIDGE			EA	1

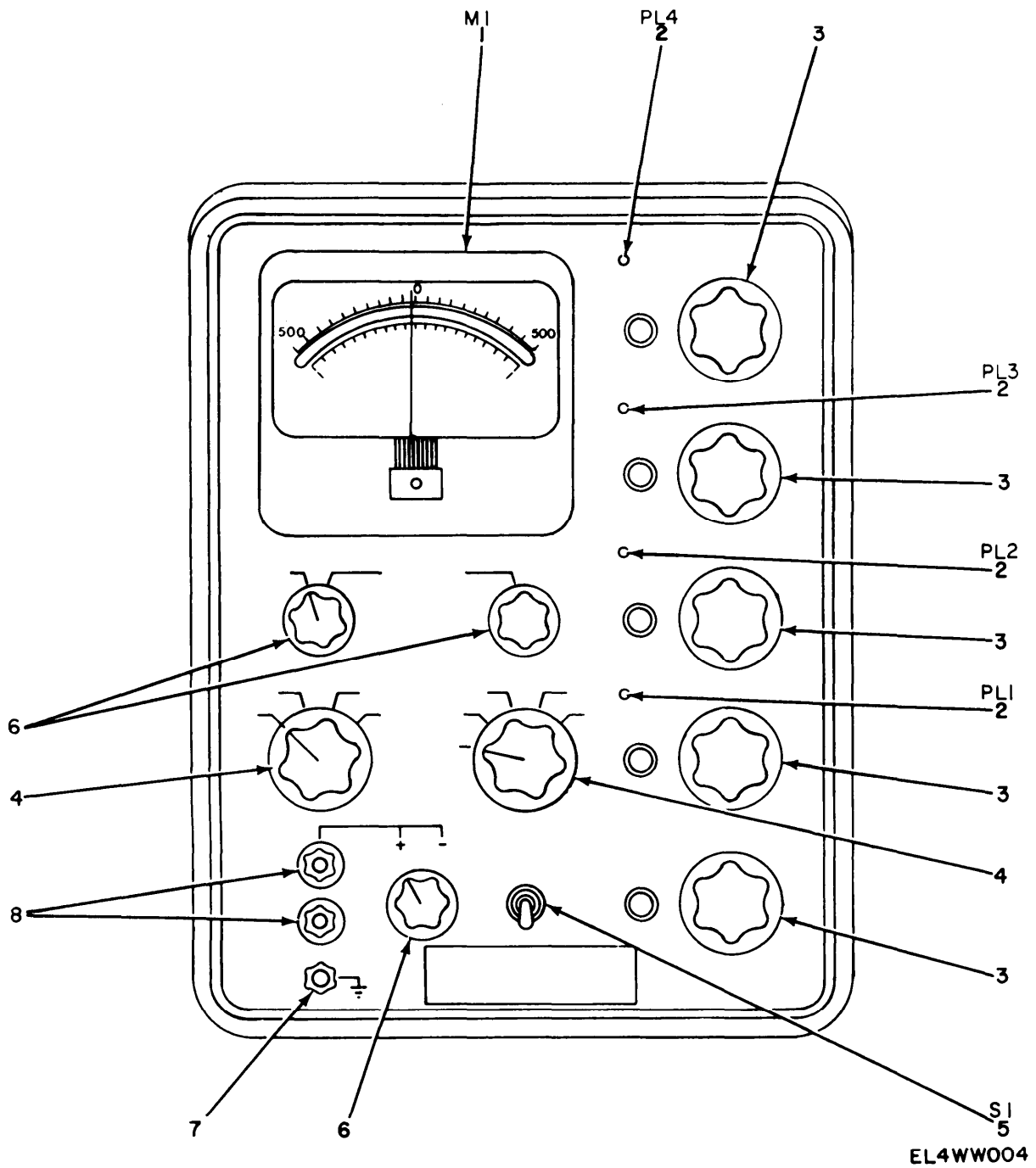
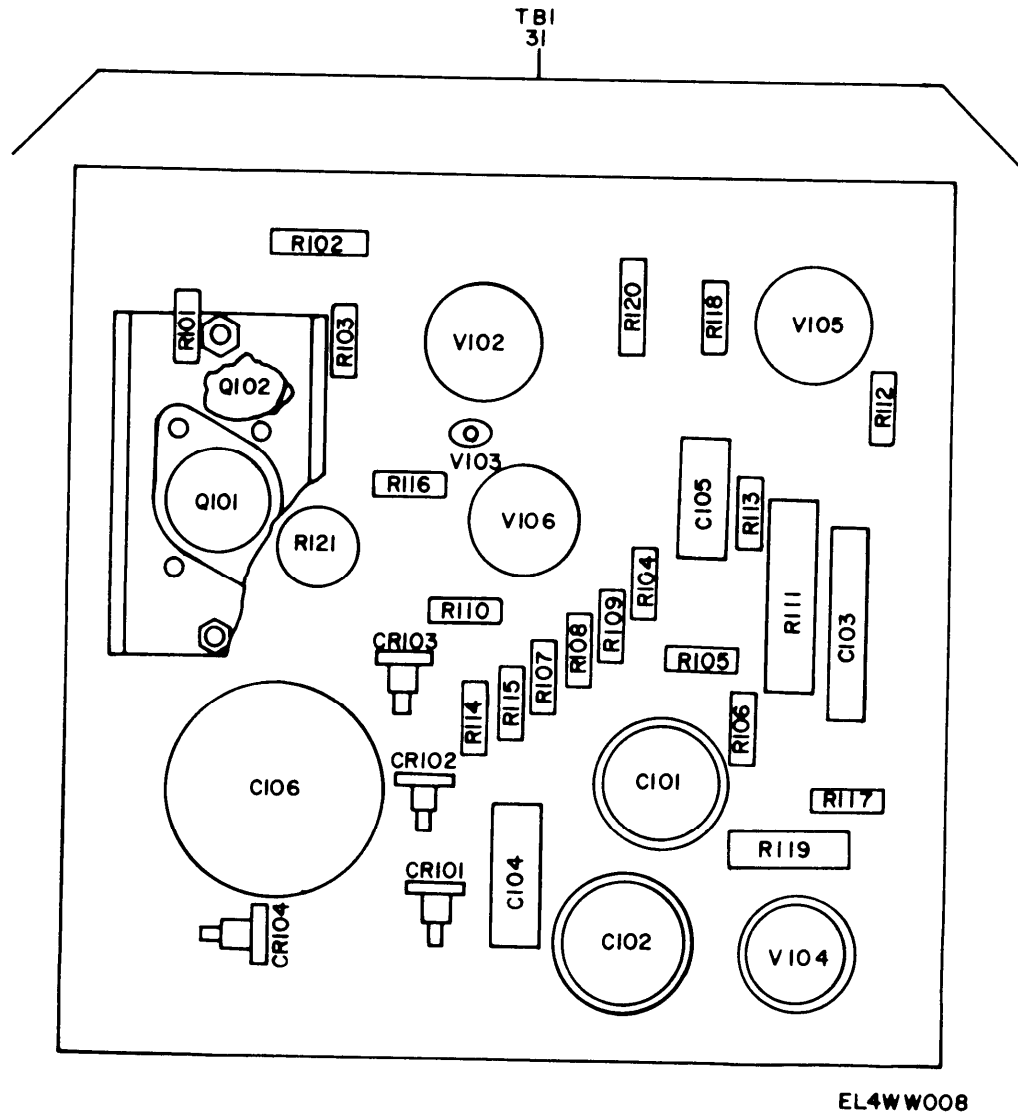


Figure 2. Voltmeter, Electronic, ME-161A/U, Panel Assembly, Front View.

SECTION II		TM11-6625-599-20P-1							
(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)	
ILLUSTRATION									
(A)	(B)	NATIONAL			DESCRIPTION			QTY	
FIG	ITEM	STOCK	PART					INC	
NO.	NO.	CODE	NUMBER	NUMBER	FSCM	USABLE ON CODE	U/M	IN	
								UNIT	
2	2	PAOZZ	6240-00-155--8706	47	08806	LAMP, INCANDESCENT		EA	4
2	3	PAOZZ	5355-00-064-1035	S-642-3-BB	75376	KNOB		EA	5
2	4	PAOZZ	5355-00-688-9156	S-653-BB-L	75376	KNOB		EA	2
2	6	PAOZZ	5355-00-720-5087	S-647-3L	75376	KNOB		EA	3





EL4W008

Figure 3. Voltmeter, Electronic, ME-161A/U, Circuit Board Assembly 801B-523 (Sheet 1 of 2).

REF. DES.	ITEM NO.	REF. DES.	ITEM NO.
C101	1	R109	16
C102	1	R110	17
C103	2	R111	18
C104	3	R112	19
C105	4	R113	20
C106	5	R114	12
CR101	6	R115	21
CR102	6	R116	22
CR103	6	R117	23
CR104	6	R118	20
Q101	7	R119	24
Q102	8	R120	25
R101	9	R121	26
R102	10	V102	27
R103	11	V103	28
R104	12	V104	29
R105	13	V105	30
R106	13	V106	30
R107	14		
R108	15		

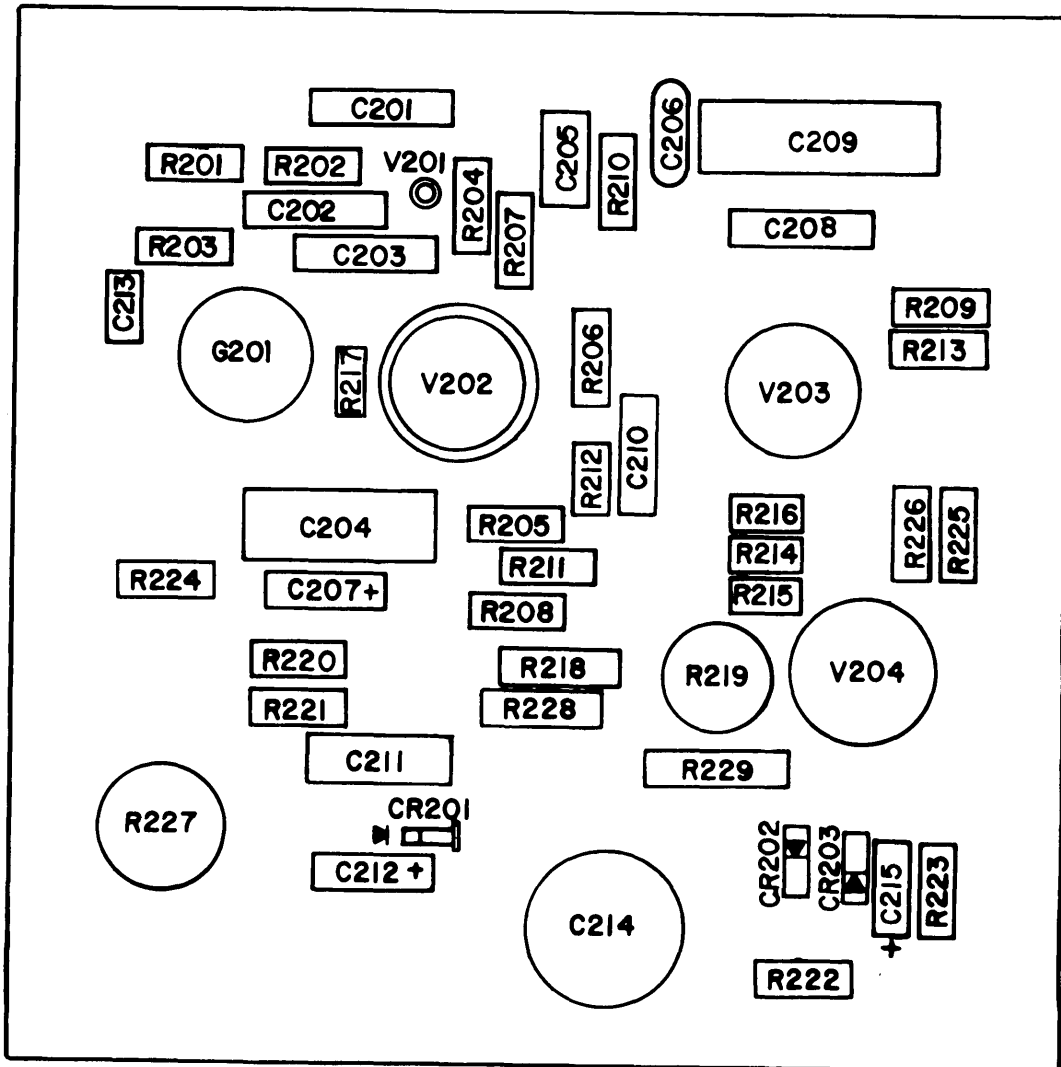
EL4WW009

Figure 3. Voltmeter, Electronic, ME-161A/U, Circuit Board Assembly 801B-523 (Sheet 2 of 2).

SECTION II		TM11-6625-599-20P-1					(7)	(8)	
(1)	(2)	(3)	(4)	(5)	(6)				
ILLUSTRATION									
(A)	(B)	NATIONAL			DESCRIPTION			QTY	
FIG	ITEM	STOCK	PART					INC	
NO.	NO.	CODE	NUMBER	NUMBER	FSCM	USABLE ON CODE	U/M	IN	
								UNIT	
3	27	PAOZZ	5960-00-852-0235	6BQ5	81349	ELECTRON TUBE		EA	1
3	29	PAOZZ	5960-00-836-6273	OG3-85A2	73445	ELECTRON TUBE		EA	1
3	30	PAOZZ	5960-00-827-8782	12AX7-WA	81349	ELECTRON TUBE		EA	2







EL4WWOIO

Figure 4. Voltmeter, Electronic ME-161A/U, Circuit Board Assembly, (Sheet 1 of 2).

REF. DES.	ITEM NO.	REF. DES.	ITEM NO.	REF. DES.	ITEM NO.	REF. DES.	ITEM NO.
C201	1	C214	10	R208	19	R221	28
C202	1	C215	11	R209	14	R222	29
C203	2	CR201	12	R210	14	R223	29
C204	3	CR202	12	R211	20	R224	30
C205	4	CR203	12	R212	21	R225	22
C206	5	G201	13	R213	22	R226	22
C207	6	R201	14	R214	14	R227	31
C208	1	R202	14	R215	23	R228	32
C209	3	R203	14	R216	24	R229	32
C210	1	R204	15	R217	25	V201	33
C211	7	R205	16	R218	26	V202	34
C212	8	R206	17	R219	27	V203	35
C213	9	R207	18	R220	28	V204	36

EL4WW011

Figure 4. Voltmeter, Electronic, ME-161A/U, Circuit Board Assembly, (Sheet 2 of 2).

SECTION II				TM11-6625-599-20P-1					
-1	-2	-3	-4	-5	-6	-7	-8		
ILLUSTRATION									
(A)	(B)	NATIONAL			DESCRIPTION		QTY		
FIG	ITEM	STOCK	PART				INC		
NO.	NO.	NUMBER	NUMBER	FSCM		USABLE ON CODE	U/M	IN	
								UNIT	
4	34	PAOZZ	5960-00-061-1186	6267-EP86	73445	TUBE, ELECTRON		EA	1
4	35	PAOZZ	5960-00-834-4045	6AW8A	81349	ELECTRON TUBE		EA	1
4	36	PAOZZ	5960-00-503-4880	0A2WA	81349	ELECTRON TUBE		EA	1

NOTE: LATEST NATIONAL STOCK NUMBER AND PART NUMBER ASSIGNMENTS ARE INCLUDED AT END OF INDEX

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5355-00-064-1035	2	3	5355-00-720-5087	2	6
5920-00-131-9816	1	5	5960-00-827-8782	3	30
5920-00-199-9498	1	5	5960-00-834-4045	4	35
5960-00-503-4880	4	36			

PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
				10300253	18876	1	5
S-642-3-BB	75376	2	3	12AX7-WA	81349	3	30
S-647-3L	75376	2	6	47	08806	2	2
S-653-BB-L	75376	2	4	6AW8A	81349	4	35
OAZWA	81349	4	36	6900-15	28569	1	5

LATEST NATIONAL STOCK NUMBER ASSIGNMENTS

STOCK NUMBER	FIG. NO.	ITEM NO.
5960-00-061-1186	4	34
6240-00-1555-8706	2	2
5355-00-668-9156	2	4
5960-00-836-6273	3	29
5960-00-852-0235	3	27

LATEST PART NUMBER ASSIGNMENTS

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
OG3-85A2	73445	3	29
6267-EF86	76445	4	34
6BQ5	81349	3	27

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DATE

23 Jan 78

TITLE

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PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.
33			
44		19	
45			

For item 2, change the NSN to read: 5835-00-134-9186.  
Reason: Accuracy.

Identify the cover on the junction box (item no. 5).  
Reason: It is a separate item and is not called out on figure 19.

Add the cover of the junction box as an item in the listing for figure 19.  
Reason: Same as above.

S  
A  
M  
P  
L  
E

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PUBLICATION NUMBER TM 11-6625-599-20P-1	DATE 30 Sep 80	TITLE Voltmeter, Electronic AN/USM-98A
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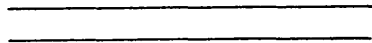
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29-136  
29-427  
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USAR: None

For explanation of abbreviations used, see AR 310-50.

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PKG SIZE	ITEM NO	BULK RCPT DATE	SLAGPC CONTROL NO		
	<b>33C372</b>	<b>AB3116</b>	<b>3117</b>	<b>18667</b>	

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