

TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND  
SPECIAL TOOLS LISTS

FOR

RADIO SET AN/ARC-102 (NSN 5821-00-050-8255)

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HEADQUARTERS, DEPARTMENT OF THE ARMY  
19 OCTOBER 1981



**ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS  
 FOR  
 RADIO SET AN/ARC-102 (NSN 5821-00-050-8255)**

Current as of 28 May 1981

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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 Publication and Blank Forms), or DA Form 2028-2 located in back of this manual direct to Commander, US Army Communications-Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07708.

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\*This manual supersedes TM 11-5821-248-20P, 30 September 1976.



## 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, direct support, and general support maintenance of the AN/ARC-102. 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 tailed 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>Application/Explanation</i>
H-	The lowest maintenance level capable of complete repair of the support item is the general support level.
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:

*Recoverability*

*codes*

*Definition*

- Z- Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.
- D- Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.

*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/ARC-102 and its component  
TM 11-5821-248-12, Radio Set AN/ARC-102

b. The illustrations in this manual are identical to those published in TM 11-5821-248-34P. 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.

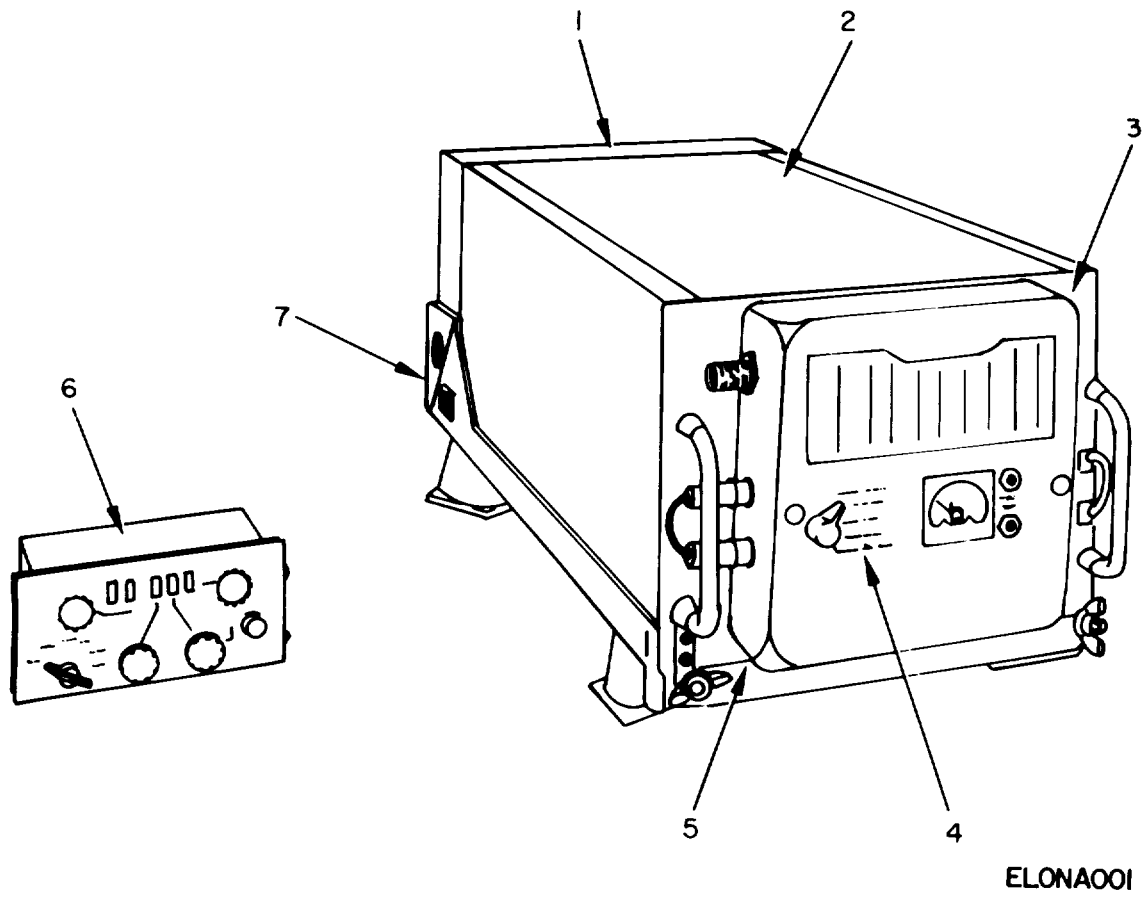
(2) *Second.* After finding the figure and item number, locate the figure and item number in repair parts list.

**6. Abbreviations**

Not applicable.

(Next printed page is 4)





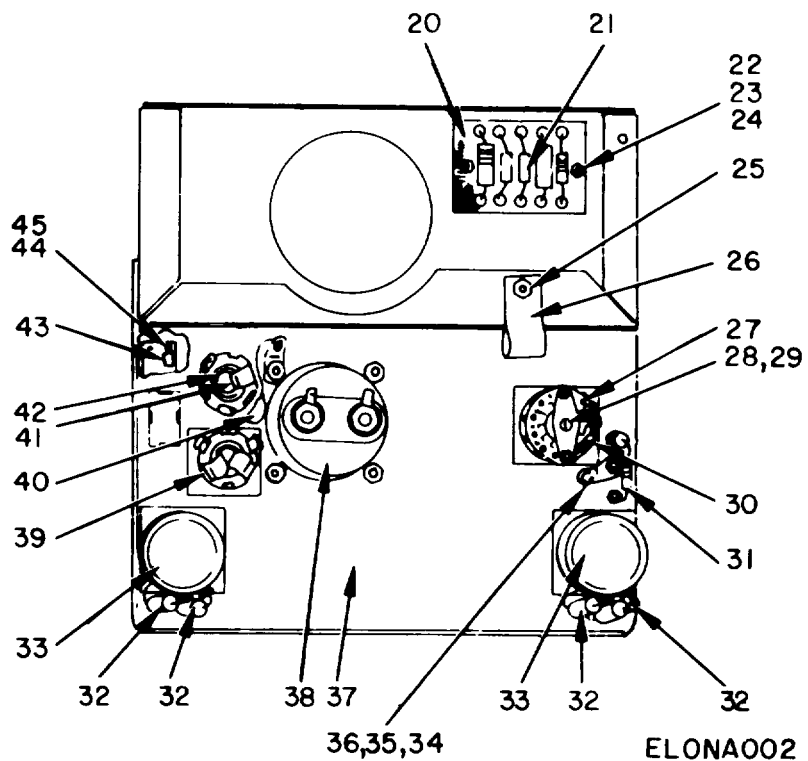
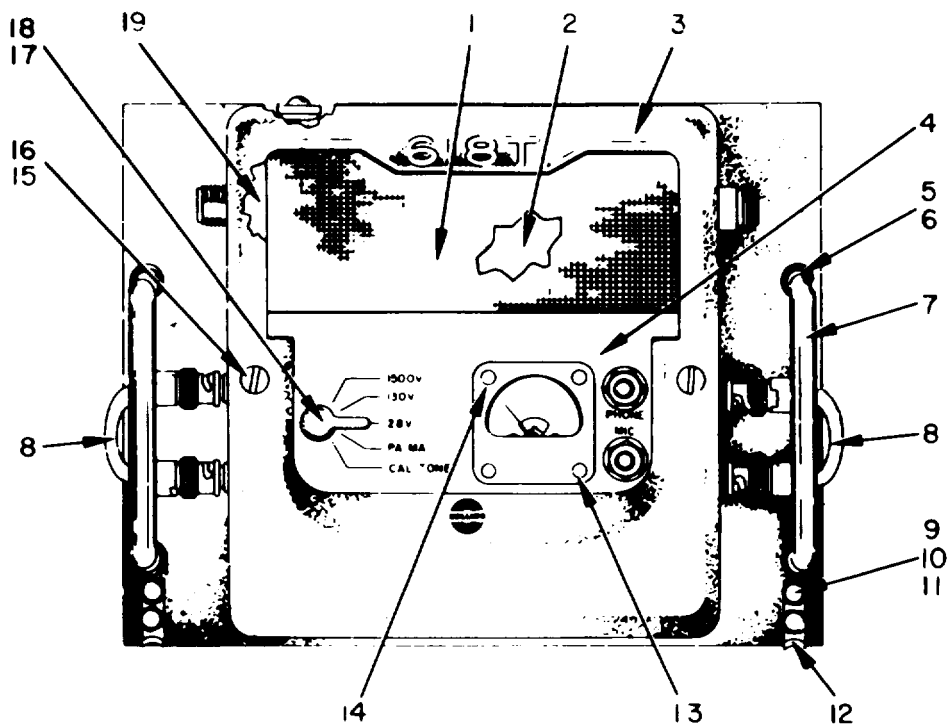
ELONA001

Figure 1. Radio Set, AN/ARC-102.



SECTION II

(1) ILLUSTRATION (A) FIG NO	(2) (B) ITEM NO	(3) SMR CODE	(4) NATIONAL STOCK NUMBER	(5) FSCM	(6) PART NUMBER	(7) DESCRIPTION  USABLE ON CODE	(8) QTY INC IN UNIT
GROUP 00 RADIO SET, AN/ARC-102							
1	5	PAOHD	5821-00-604-3307	80058	RT698ARC102	TRANSCEIVER	EA 1
1	6	PAOHD	5821-00-019-8405	80058	C3940ARC94	CONTROL,RADIO SET	EA 1
1	7	PAOHD	5821-00-050-8168	80058	PP3702ARC102	POWER INVERTER	EA 1

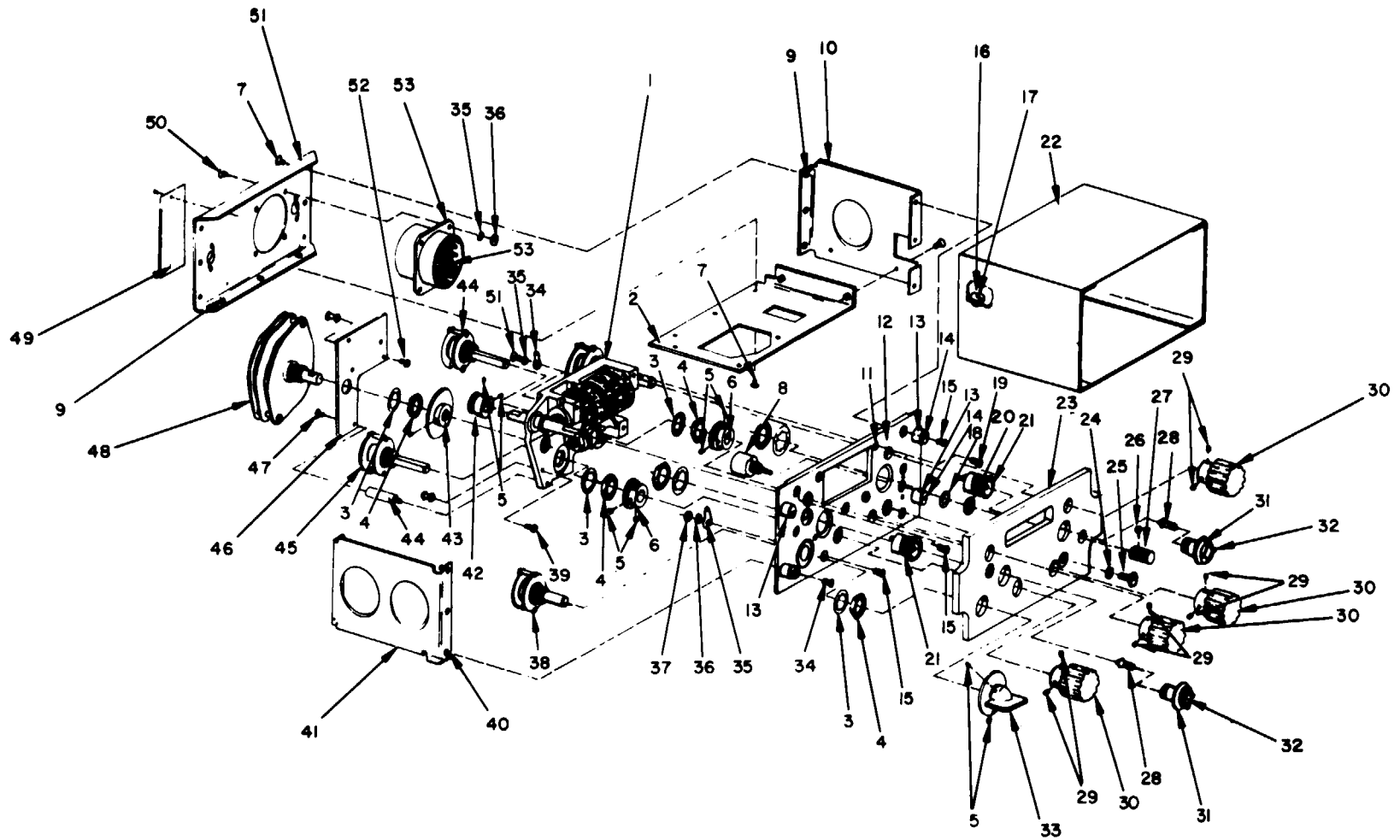


ELONA002

Figure 2. Chassis Assembly.

SECTION II

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6) DESCRIPTION	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER		USABLE ON CODE	QTY INC IN U/M UNIT
						GROUP 0101 CHASSIS ASSEMBLY		
2	17	PAOZZ	5355-00-538-6979	13499	506-6101-002	KNOB		EA 1



ELONA003

Figure 3. Radio Set Control C-3940/ARC-94.

SECTION II

(1) ILLUSTRATION (A) FIG NO	(2) (B) ITEM NO	(3) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) FSCM	(5) PART NUMBER	(6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
3	27	PAOZZ	5355-00-828-5433	13499	548-4140-002	GROUP 02 RADIO SET CONTROL C-3940/ARC-94 KNOB, RADIO		EA	1
3	28	PAOZZ	6240-00-155-7836	96906	MS25237-327	LAMP, INCANDESCENT		EA	2
3	30	PAOZZ	5355-00-865-3144	13499	546-6251-002	KNOB, COUNTER		EA	4
3	33	PAOZZ	5355-00-883-1601	13499	546-6250-002	KNOB, SWITCH		EA	1

## NATIONAL STOCK NUMBER AND PART NUMBER INDEX

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		
5821-00-019-8405	1	6	5355-00-828-5433	3	27		
5821-00-050-8168	1	7	5355-00-865-3144	3	30		
5355-00-538-6979	2	17	5355-00-883-1601	3	33		
5821-00-604-3307	1	5					
FSCM	PART NUMBER	FIGURE NO	ITEM NO	FSCM	PART NUMBER	FIGURE NO	ITEM NO
80058	C3940ARC94	1	546-6250-002	13499	546-6250-002	3	
80058	PP3702ARC102	1	7	13499	546-6251-002	3	30
80058	RT698ARC102	1	5	13499	548-4140-002	3	27
13499	506-6101-002	2	17				

## LATEST NATIONAL STOCK NUMBER ASSIGNMENTS

STOCK NUMBER	FIGURE NO.	ITEM NO.
6240-00-155-7836	3	28

## LATEST PART NUMBER ASSIGNMENTS

FSCM	PART NUMBER	FIGURE NO.	ITEM NO.
96906	MS25237-327	3	28

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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		

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 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

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