

**TECHNICAL MANUAL**

**ORGANIZATIONAL MAINTENANCE**

**REPAIR PARTS**

**AND SPECIAL TOOLS LIST**

**FOR**

**RADIO SET AN/ARC-164(V)12**

**(NSN 5821-01-071-5624)**

**AND**

**RADIO SET AN/ARC-164(V)16**

**(NSN 5841-01-122-7094)**



TECHNICAL MANUAL }  
 NO. 11-5841-286-20P }

HEADQUARTERS  
 DEPARTMENT OF THE ARMY  
 WASHINGTON, DC, 11 May 1984

**ORGANIZATIONAL MAINTENANCE REPAIR  
 PARTS AND SPECIAL TOOLS LIST  
 FOR  
 RADIO SET AN/ARC-164(V)12  
 (NSN 5821-01-071-5624)  
 AND  
 RADIO SET AN/ARC-164(V)16  
 (NSN 5841-01-122-7094)**

Current as of 9 February 1984

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**  
 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 Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DR-SEL-ME-MP, Fort Monmouth, New Jersey 07703.  
 In either case, a reply will be furnished direct to you.

**Table of Contents**

	Page	Illus Figure
SECTION I. Introduction.....	1	
SECTION II. Repair Parts List.....	5	
GROUP 00 Radio Set AN/ARC-164(V)12 and Radio Set AN/ARC-164(V)16.....	5	1
0101 Switching Unit (1A1).....	7	3
0201 Signal Data Converter (2A1).....	9	5
03 Mount MT-6017/ARC-164(V) (Unit3).....	11	9
SECTION III. Special Tools List (Not applicable)		
IV. National Stock Number and Part Number Index.....	12	

\* This manual supersedes TM 11-5841-286-20P, 27 March 1981.



# SECTION I

## INTRODUCTION

### 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 the AN/ARC-164(V)12 and AN/ARC-164(V)16. 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 alphanumeric 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.
PB-	Item procured and stocked for insurance pur-

<i>Code</i>	<i>Definition</i>
	pose because essentiality dictates that a minimum quantity be available in the supply system.
PC-	Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
PD-	Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.
PE-	Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
PF-	Support equipment which will not be stocked but which will be centrally procured on demand.
PG-	Item procured and stock to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which, because of probable discontinuance or shutdown of production facilities, would prove uneconomical to reproduce at a later time.
KD-	An item of a depot overhaul/repair and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
KF-	An item of a maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at organizational or intermediate levels of maintenance.
KB-	Item included in both a depot overhaul/repair kit and a maintenance kit.
MO-	Item to be manufactured or fabricated at the organizational level.
MF-	Item to be manufactured or fabricated at the direct support maintenance level.
MH-	Item to be manufactured or fabricated at the general support maintenance level.
MD-	Item to be manufactured or fabricated at the depot maintenance level.
AO-	Item to be assembled at organization level.
AF-	Item to be assembled at direct support maintenance level.

<i>Code</i>	<i>Definition</i>
AH—	Item to be assembled at general support maintenance level.
AD—	Item to be assembled at depot maintenance level.
XA—	Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.
XB—	Item is not procured or stocked. If not available through salvage, requisition.
XC—	Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
XD—	A support item that is not stocked. When required, item will be procured through normal supply channels.

**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 750-1.

(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>
C -	Crew or operator maintenance performed within organizational maintenance.
O -	Support item is removed, replaced, used at the organizational level.
F -	Support item is removed, replaced, used at the direct support level.
H-	Support item is removed, replaced, used at the general support level.
D-	Support items that are removed, replaced, used at depot, mobile depot, specialized repair activity only.

(b) The maintenance code entered in the fourth positions 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>
O-	The lowest maintenance level capable of complete repair of the support item is the organizational level.
F-	The lowest maintenance level capable of complete repair of the support item is the direct support level.
H-	The lowest maintenance level capable of complete repair of the support item is the general support level.
D—	The lowest maintenance level capable of complete repair of the support item is the depot level.
L-	Repair restricted to designated specialized repair activity.
Z-	Nonreparable. No repair is authorized.
B—	No repair is authorized. The item may be reconditioned by adjusting, lubricating, etc., at the user level. No parts or special tools are procured for the maintenance of this item.

(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.
O—	Reparable item. When uneconomically repairable, condemn and dispose at organizational level.
F—	Reparable item. When uneconomically repairable, condemn and dispose at the direct support level.
H-	Reparable item. When uneconomically repairable, condemn and dispose at the general support level.
D—	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.
L -	Reparable item. Repair, condemnation, and disposal not authorized below depot/specialized repair activity level.
A—	Item requires special handling or condemnation procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material). Refer to appropriate manuals/directives for specific instructions.

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

d. *Federal Supply Code for Manufacturer (FSCM)*. The FSCM is a 5-digit numeric code listed in SB 708-41/42 which is used to identify the manufacturer, distributor, or Government agency, etc.

e. *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.

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. Usable on codes are shown in the description column. Uncoded items are applicable to all models. Identification of the usable on codes used in this publication are:

<i>Code</i>	<i>Used on</i>
EJM	AN/ARC-164(V)12
FFK	AN/ARC-164(V)16

b. The illustrations in this manual are identical to those published in TM 11-5841-286-30P. 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 organiza-

tional authorized items appear in this manual.

c. The following publication pertains to the AN/ARC-164(V)12 and AN/ARC-164(V)16 and their components:

TM 11-5841-286-13, Radio Set AN/ARC-164(V)12.

d. National stock numbers (NSN's) that are missing from P source coded items have been applied for and will be added to this TM by future change/revision when they are entered in the Army Master Data File (AMDF). Until the NSN's are established and published, submit exception requisitions to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-MM, Fort Monmouth, New Jersey 07703 for the part required to support your equipment.

**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.

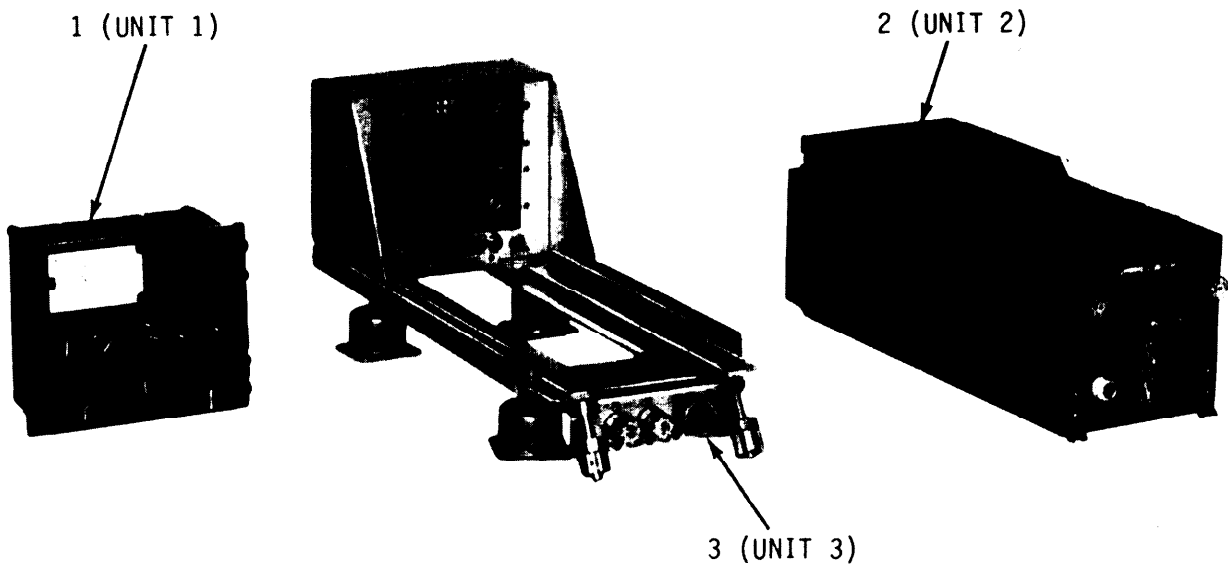
b. When National stock number or part number is known.

(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 alphanumeric 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.



EL6EY001

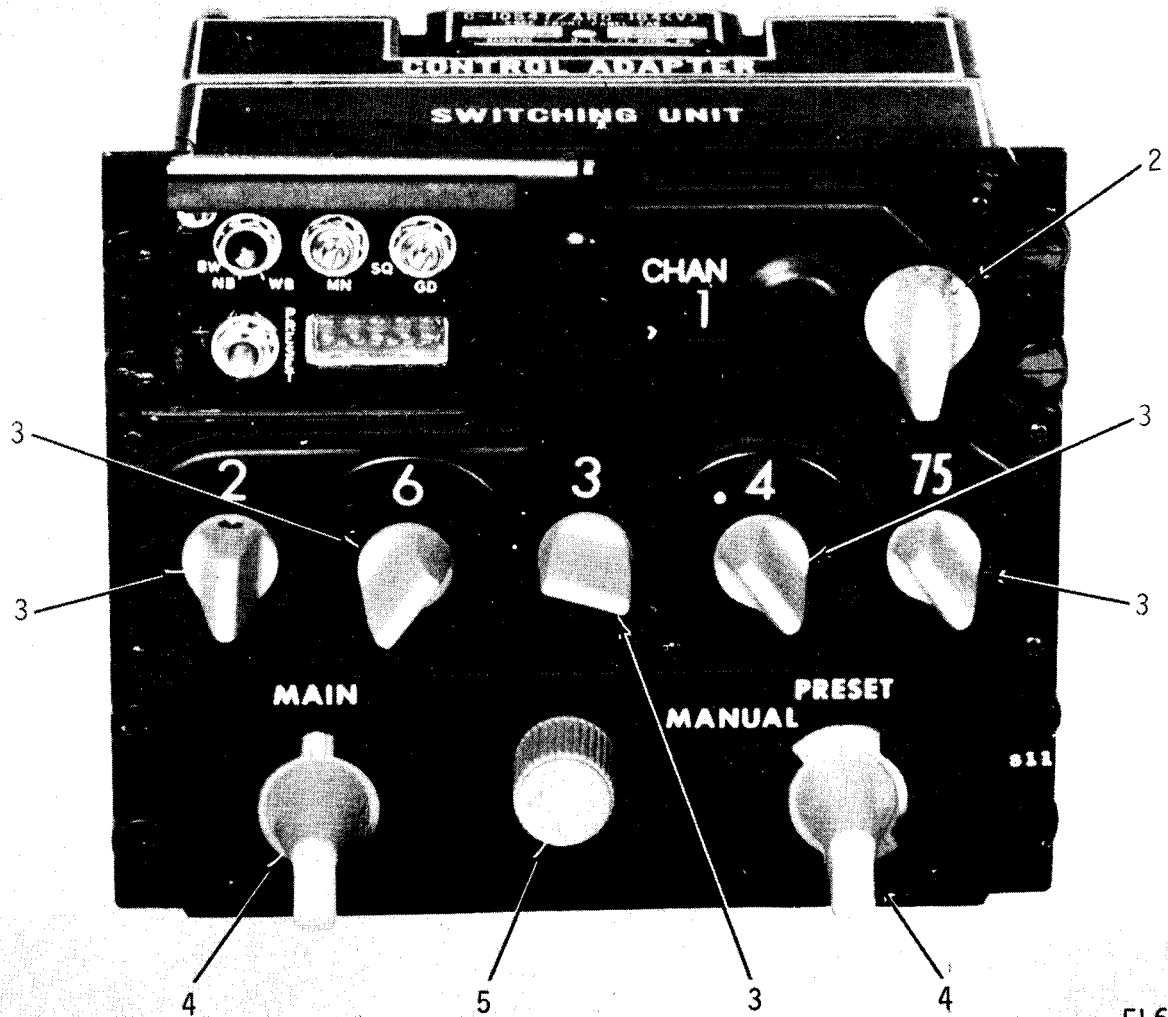
Figure 1. Radio Set AN/ARC-164(V)12.



SECTION II

TM 11-5841-286-20P

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION  USABLE ON CODE	U/M	QTY INC UNIT
						GROUP 00 AN/ARC-164(V)12 AND AN/ ARC-164(V)16		
1	1	PAODD	5821-01-070-4433	80058	C-10547/ARC-164(V)	CONTROL, RADIO SET.....	EA	1
1	2	PAODD	5821-01-070-5844	80058	RT-1288/ARC-164(V)12	RECEIVER- TRANSMITTE .....	EJME A	1
1	2	PAODD	5820-01-122-7094	80058	RT1288A/ARC-164(V)16	RECEIVER TRANSMITTE .....	EFK EA	1
1	3	PAODD	5821-01-070-4271	80058	MT-6017/ARC-164(V)	MOUTING BASE, ELECT .....	EA	1



EL6EY004

Figure 3. Switching Unit (1A1).

SECTION II

TM 11-5841-286-20P

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION  USABLE ON CODE	U/M	QTY INC UNIT
						<b>GROUP 0101 SWITCHING UNIT (1A1)</b>		
3	2	PAOZZ	5355-01-004-9583	37695	148054-1	KNOB .....	EA	1
3	3	PAOZZ	5355-01-089-3769	37695	148059-1	KNOB .....	EA	5
3	4	PAOZZ	5355-01-004-9582	37695	148051-1	KNOB .....	EA	2
3	5	PAOZZ	5355-01-004-9581	37695	148053-1	KNOB .....	EA	1
7								

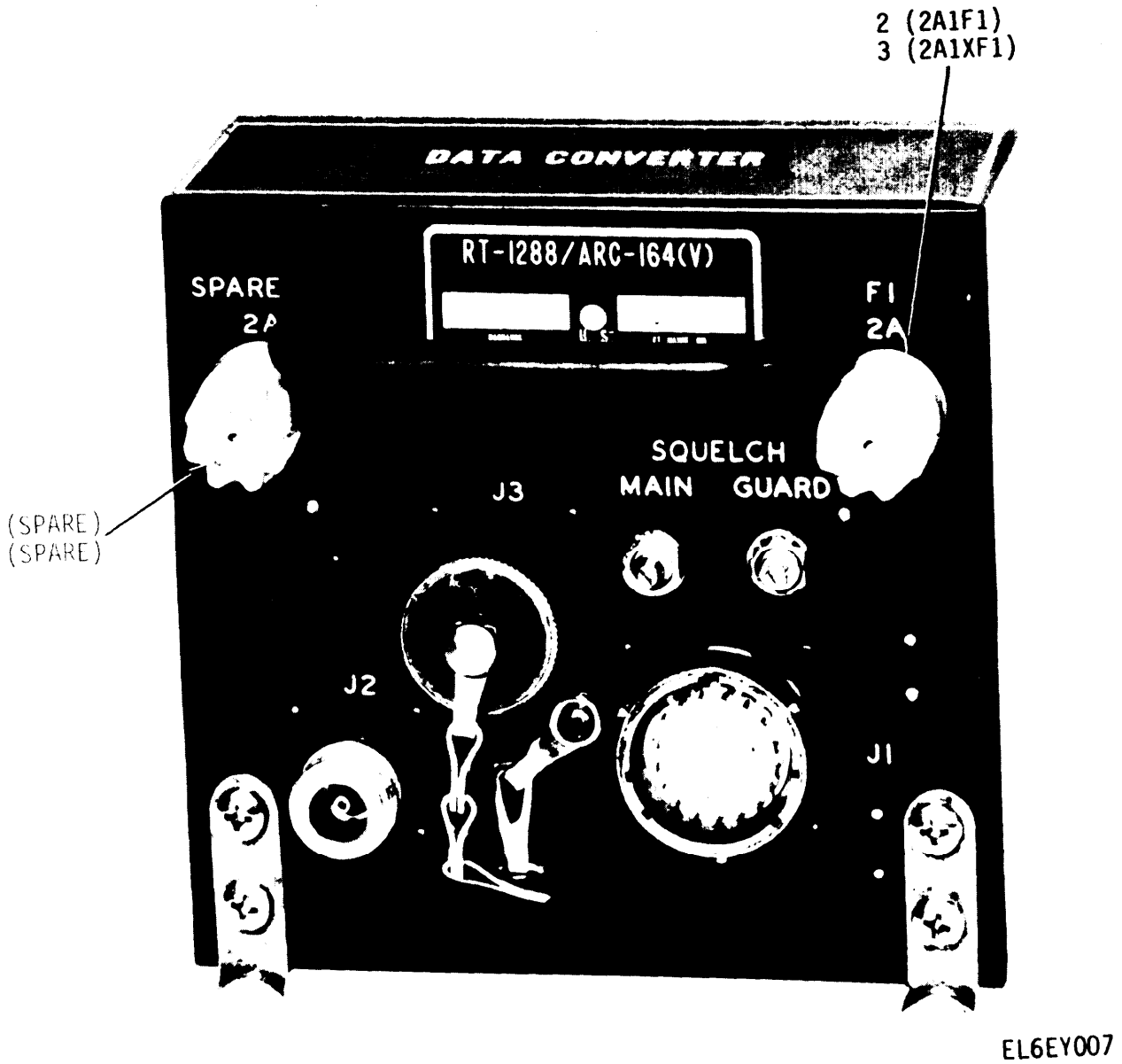
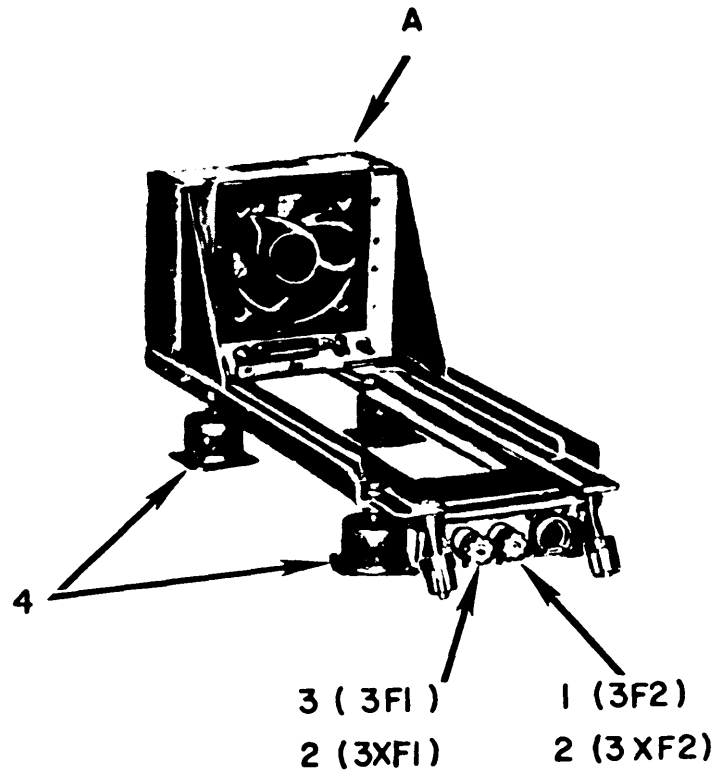


Figure 5. Signal Data Converter (2A1).

SECTION II

TM 11-5841-286-20P

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
5	2	PAOZZ	5920-00-280-4960	81349	F02A250V2A	GROUP 0201 SIGNAL DATA CONVERTER (2A1) FUSE,CAR TRIDGE.....	EA	2



EL6EY011'

Figure 9. Radio Set AN/ARC-164(V)12.

SECTION II

TM 11-5841-286-20P

(1) ILLUSTRATIONS		(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	U/M	QTY INC IN UNIT
<b>GROUP 03 MOUNT MT-6017/ARC-164(V) (UNIT 3)</b>								
9	1	PAOZZ	5920-00-280-4465	81349	F02A250V1AS	FUSE, CARTRIDGE .....	EA	1
9	2	PAOZZ		81349	F02A250V25AS	FUSE .....	EA	1
9	3	PAOZZ	5920-00-556-0144	81349	FHN20G	FUSEHOLDER,EXTRACTO .....	EA	2
9	4	PAOZZ		81860	844-CB-10	MOUNT,RESILIENT .....	EA	4

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5920-00-280-4465	9	1	5821-01-070-4271	1	3
5920-00 280-4960	5	2	5821-01-070-4433	1	1
5920-00-556-0144	9	3	5821-01-070-5844	1	2
5355-01-004-9581	3	5	5355-01-089-3769	3	3
5355-01-004-9582	3	4	5820-01-122-7094	1	2
5355-01-004-9583	3	2			

FSCM	PART NUMBER	FIGURE NO.	ITEM NO.	FSCM	PART NUMBER	FIGURE NO.	ITEM NO.
81860	B44-CB-1O	9	4	80058	RT-1288/ARC-164(V)12	1	2
80058	C-10547/ARC-164(V)	1	1	80058	RT-1288A/ARC-164(V)16	1	2
81349	FHN20G	9	3	37695	148051-1	3	4
81349	F02A250V2A	5	2	37695	148053-1	3	5
81349	F02A250V1AS	9	1	37695	148054-1	3	2
81349	F02A250V25AS	9	2	37695	148059-1	3	3
80058	MT-6017/ARC-164(V)	1	3				



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 THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)  
 Commander  
 Stateside Army Depot  
 ATTN: AMSTA-US  
 Stateside, N.J. 07703

DATE SENT  
 10 July 1975

PUBLICATION NUMBER TM 11-5840-340-20P	PUBLICATION DATE 23 Jan 78	PUBLICATION TITLE Radar Set AN/PRC-76
--	-------------------------------	--

BE EXACT PIN-POINT WHERE IT IS				IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:
PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO	
33				For item 2, change the NSN to read: 5835-00-134-9186. <u>Reason:</u> Accuracy.
44		19		Identify the cover on the junction box (item no. 5). <u>Reason:</u> It is a separate item and is not called out on figure 19.
45				Add the cover of the junction box as an item in the listing for figure 19. <u>Reason:</u> Same as above

SAMPLE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER  
 SSG I. M. DeSpirito of 999-1776

SIGN HERE

TEAR ALONG PERFORATED LINE

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

\_\_\_\_\_  
\_\_\_\_\_

**SAMPLE**

Commander  
US Army Communications-Electronics Command  
and Fort Monmouth  
ATTN: DRSEL-ME-MP  
Fort Monmouth, New Jersey 07703

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



**SOMETHING WRONG WITH THIS PUBLICATION?**

*THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.*

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER  
TM 11-5841-286-20P

PUBLICATION DATE  
11 May 1984

PUBLICATION TITLE  
AN/ARC-164(V)12 and  
AN/ARC-164(V)16

**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

**DA FORM 2028-2**  
1 JUL 79

PREVIOUS EDITIONS ARE OBSOLETE

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

---

---

TEAR ALONG PERFORATED LINE

Commander  
US Army Communications-Electronics Command  
and Fort Monmouth  
ATTN: DRSEL-ME-MP  
Fort Monmouth, New Jersey 07703

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 THIS PUBLICATION?**

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER  
TM 11-5841-286-20P

PUBLICATION DATE  
11 May 1984

PUBLICATION TITLE  
AN/ARC-164(V)12 and  
AN/ARC-164(V)16

**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

**DA FORM 2028-2**  
1 JUL 79

PREVIOUS EDITIONS  
ARE OBSOLETE

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR  
RECOMMENDATION MAKE A CARBON COPY OF THIS  
AND GIVE IT TO YOUR HEADQUARTERS.

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

---

---

TEAR ALONG PERFORATED LINE

Commander  
US Army Communications-Electronics Command  
and Fort Monmouth  
ATTN: DRSEL-ME-MP  
Fort Monmouth, New Jersey 07703

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 THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER  
TM 11-5841-286-20P

PUBLICATION DATE  
11 May 1984

PUBLICATION TITLE  
AN/ARC-164(V)12 and  
AN/ARC-164(V)16

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

DA FORM 2028-2  
1 JUL 79

PREVIOUS EDITIONS ARE OBSOLETE

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

---

---

TEAR ALONG PERFORATED LINE

Commander  
US Army Communications-Electronics Command  
and Fort Monmouth  
ATTN: DRSEL-ME-MP  
Fort Monmouth, New Jersey 07703



By Order of the Secretary of the Army:

Official:

**ROBERT M. JOYCE**

*Major-General, United States Army  
The Adjutant General*

**JOHN A. WICKMAN JR.**  
*General, United States Army  
Chief of Staff*

**DISTRIBUTION:**

To be distributed in accordance with DA Form 12-36B requirements for AN/ARC-164.





