

TM 11-5820-489-20P

TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS

FOR

CONTROL GROUP AN/GRA-6
(NSN 5820-00-644-4554)

HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1977

TECHNICAL MANUAL }
 No. 11-5820-489-20P }

HEADQUARTERS
 DEPARTMENT OF THE ARMY
 WASHINGTON, DC, 15 July 1977

**ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS
 FOR
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 (NSN 5820-00-644-4554)
 Current as of 31 March 1977**

REPORTING OF ERRORS

You can improve this manual by recommending improvements using DA Form 2028-2 (Test) located in the back of the manual. Simply tear out the self-addressed form, fill it out as shown on the sample, fold it where shown, and drop it in the mail.

If there are no blank DA Form 2028-2 (Test) in the back of your manual, use the standard DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forward to the Commander, US Army Electronics Command, ATTN: DRSEL-MA-Q, Fort Monmouth, NJ 07703.

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

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*This manual supersedes TM 11-5820-489-20P, 4 June 1969.

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/GRA-6. 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 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 the following level 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>
F —	The lowest maintenance level capable of complete repair of the support item is the direct 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:

<i>Recoverability codes</i>	<i>Definition</i>
Z —	Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.
F —	Reparable item. When uneconomically repairable, condemn and dispose at the direct support 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 AN/GRA-6 and its components:

TM 11-5038, Control Group AN/GRA-6.

b. The illustrations in this manual are identical

to those published in TM 11-5820-489-34P. Only those parts assigned the third position SMR maintenance SMR 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.

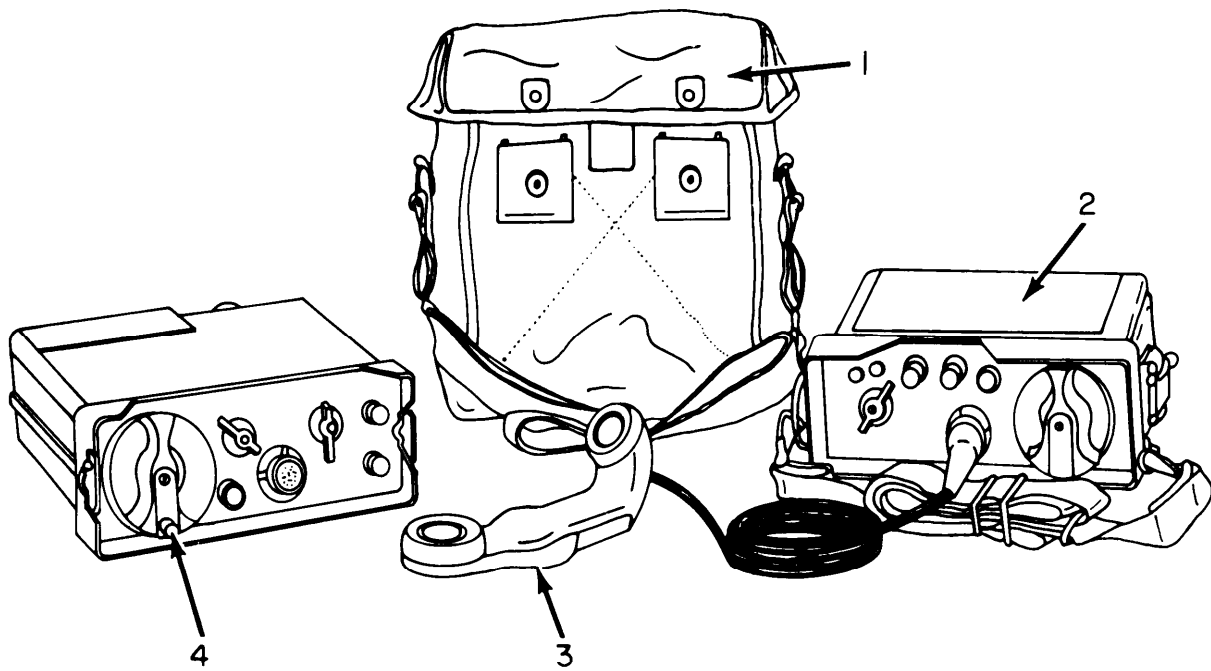
(1) *First.* Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.

(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.)



EL3FRO01

Figure 1. Control Group AN/GRA-6.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
ILLUSTRATION							QTY	
(a)	(b)	NATIONAL			DESCRIPTION		INC	
FIG	ITEM	SMR	STOCK	PART			IN	
NO.	NO.	CODE	NUMBER	NUMBER	FSCM	USABLE ON CODE	U\M	UNIT
GROUP 00 CONTROL GROUP AN/GRA-6								
1	1	PAOZZ	5820-00-404-6885	CW-189/GR	80063	BAG	EA 1	
1	2	PAOFF	5820-00-170-5171	C-433/GRC	80058	REMOTE CONTROL	EA 1	
1	3	PAOZZ	5965-00-163-9947	H-33/PT	81349	HANDSET	EA 1	
1	4	PAOFF	5820-00-170-4781	C-434/GRC	80058	LOCAL CONTROL	EA 1	

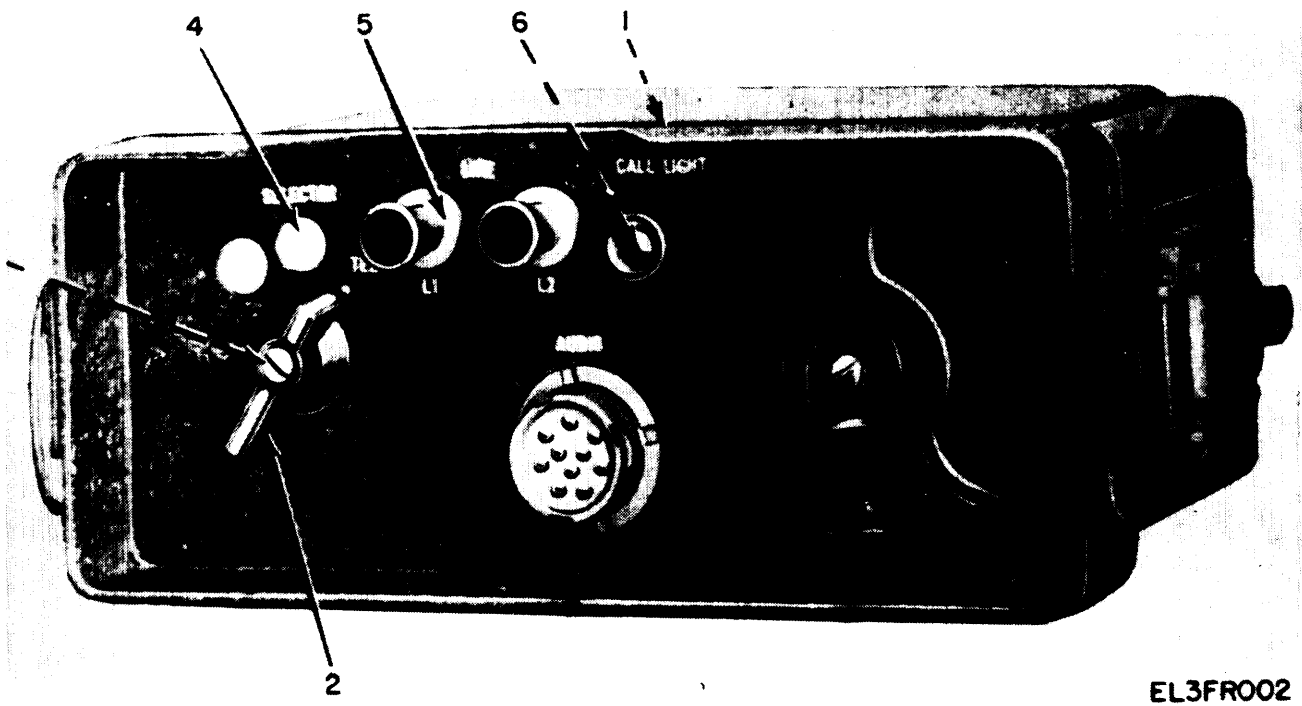


Figure 2. Remote Control C-433/GRC.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ILLUSTRATION							QTY
(a)	(b)	NATIONAL			DESCRIPTION		INC
FIG	ITEM	SMR	STOCK	PART			IN
NO.	NO.	CODE	NUMBER	NUMBER	FSCM	USABLE ON CODE	U\M
							UNIT
GROUP 01 REMOTE CONTROL C-433/GRC							
2	2	PAOZZ	5355-00-656-1358	MS91525-2	96906	KNOB	EA 1
2	6	PAOZZ	6240-00-223-9100	NE51	95412	LAMP,GLOW	EA 1

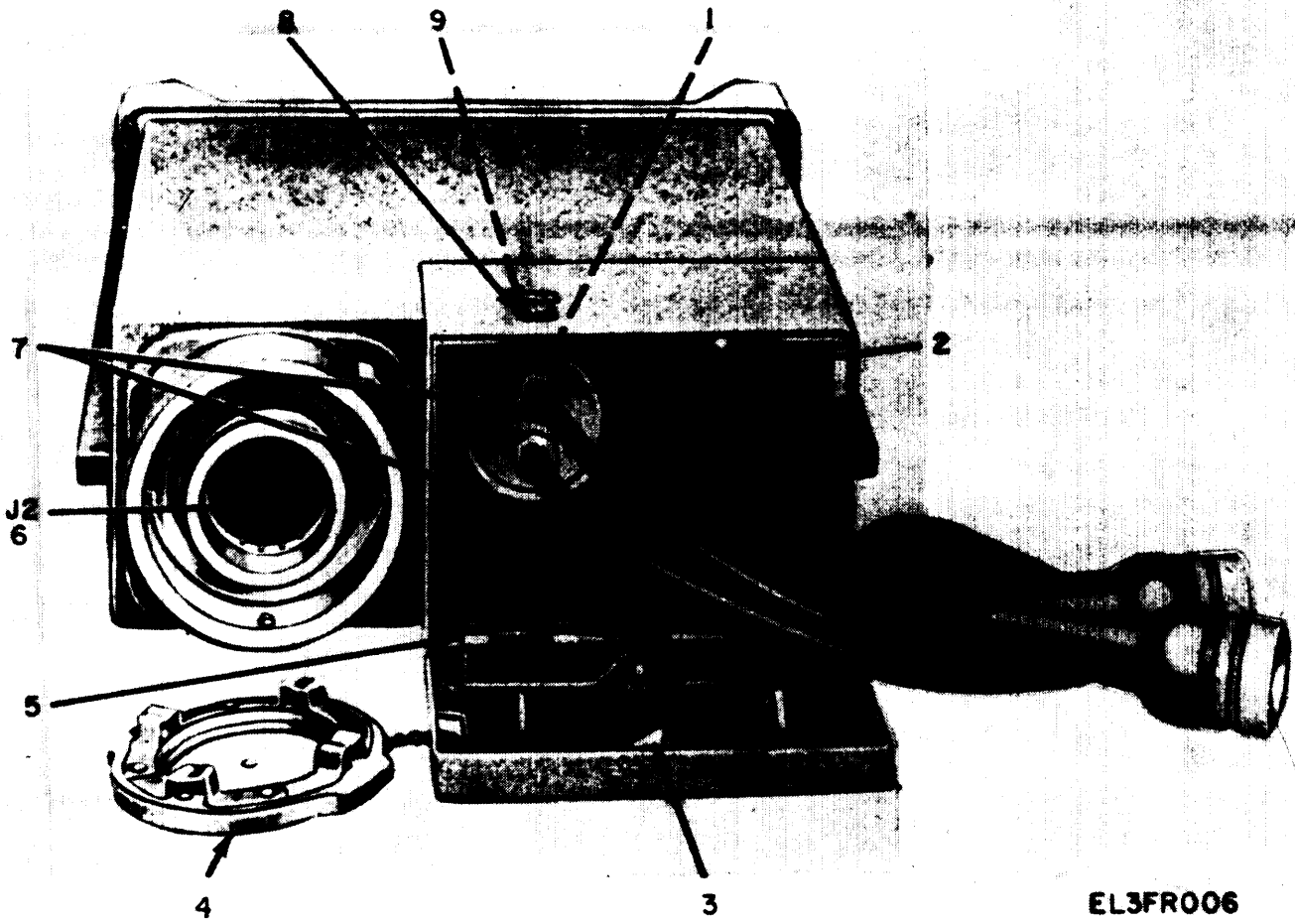


Figure 3. Local Control C-434/GRC.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
ILLUSTRATION							QTY	
(a)	(b)	NATIONAL			DESCRIPTION		INC	
FIG	ITEM	SMR	STOCK	PART			IN	
NO.	NO.	CODE	NUMBER	NUMBER	FSCM	USABLE ON CODE	U\M	UNIT
GROUP 02 LOCAL CONTROL C-434/GRC								
3	4	PAOZZ	5999-00-221-6559	SCB41623	80063	CAP,ELECTRICAL	EA	1

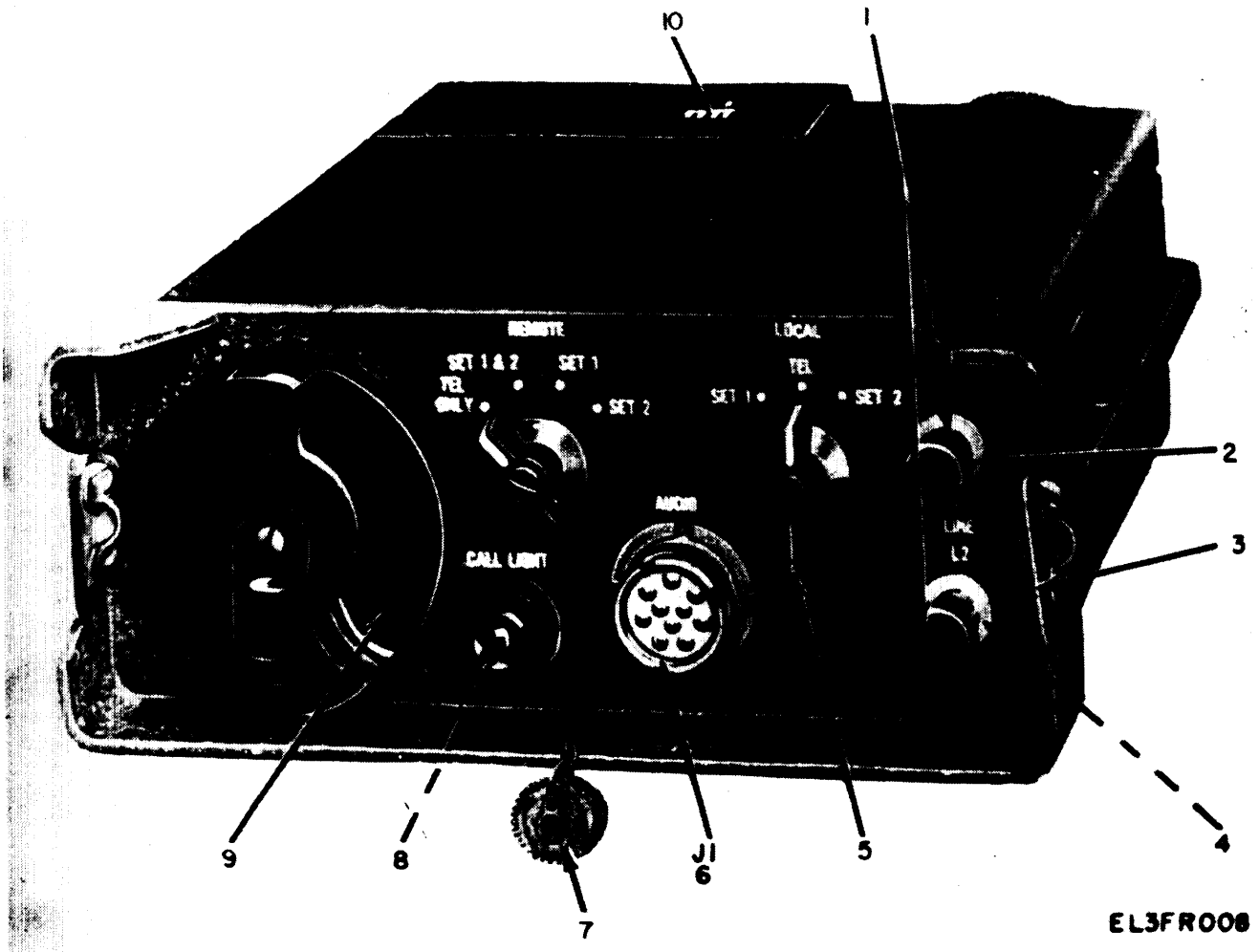


Figure 4. Local Control C-434/GRC, Over-All View.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ILLUSTRATION							
(a)	(b)	NATIONAL			DESCRIPTION		QTY
FIG	ITEM	SMR	STOCK	PART			INC
NO.	NO.	CODE	NUMBER	NUMBER	FSCM	USABLE ON CODE	U\M
							UNIT
4	5	PAOZZ	5355-00-656-1358	MS91525-2	96906		EA 1
4	7	PAOZZ	5935-00-258-4449	SCDL107431	80063		EA 1
4	8	PAOZZ	6240-00-223-9100	NE51	95412		EA 1
4	9	PAOZZ	5805-00-399-7398	SCB42442	80063		EA 1

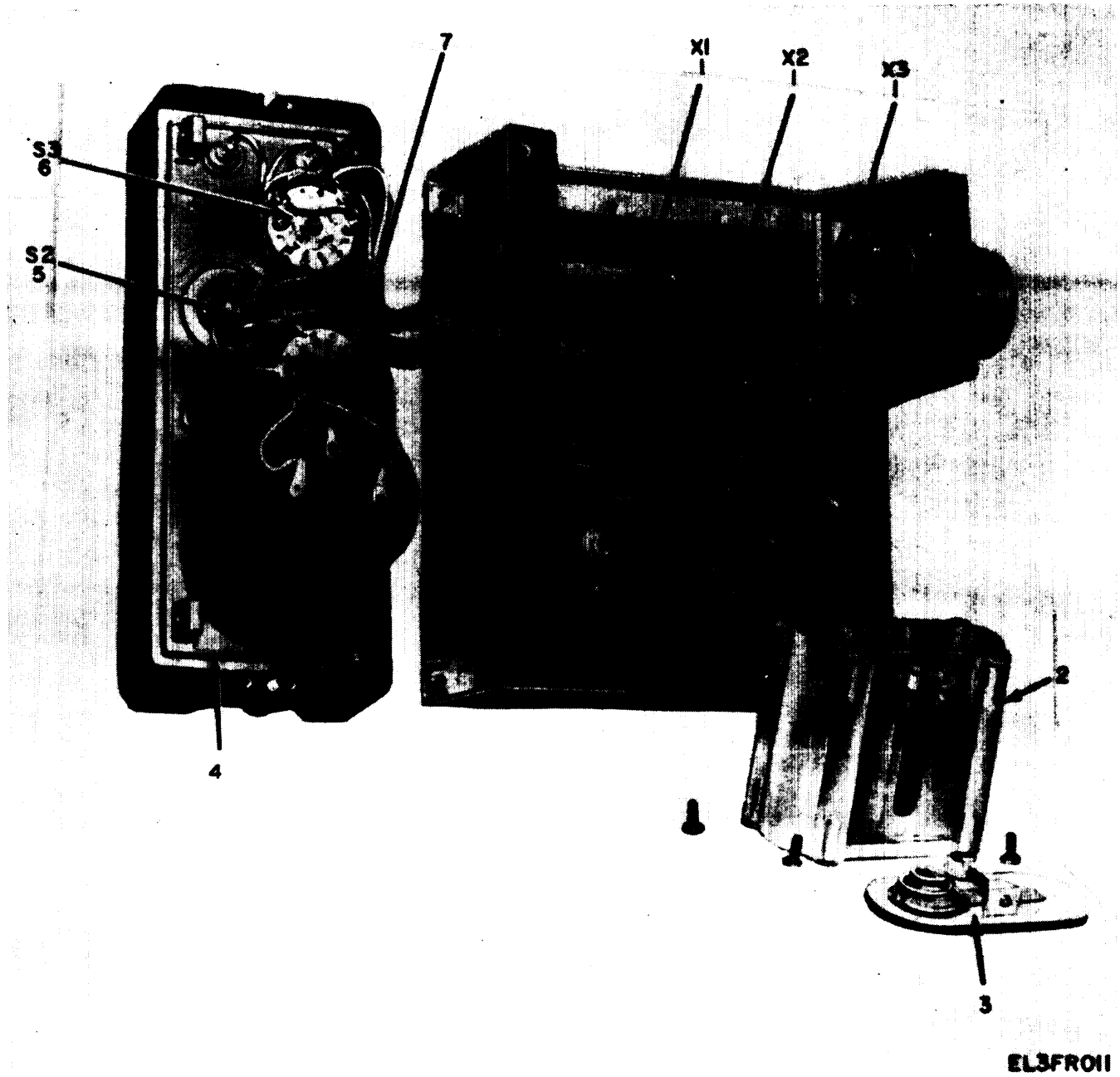


Figure 5. Local Control C-434/GRC, Disassembled View.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ILLUSTRATION							QTY
(a)	(b)	NATIONAL			DESCRIPTION		INC
FIG	ITEM	SMR	STOCK	PART			IN
NO.	NO.	CODE	NUMBER	NUMBER	FSCM	USABLE ON CODE	U\M UNIT
5	3	PAOZZ	6140-00-244-5151	SCC42415	80063	COVER,BATTERY	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	FIG. NO.	ITEM NO.	STOCK NUMBER	FIG. NO.	ITEM NO.
5965-00-163-9947	1	3	6240-00-223-9100	4	8
5820-00-170-4781	1	4	6140-00-244-5151	5	3
5820-00-170-5171	1	2	5805-00-399-7398	4	9
5999-00-221-6559	3	4	5820-00-404-6885	1	1
6240-00-223-9100	2	6			

PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
C-433/GRC	80058	1	2				
C-434/GRC	80058	1	4				
CW-189/GR	80063	1	1	SCB41623	80063	3	4
H-33/PT	81349	1	3	SCB42442	80063	4	9
NE51	95412	2	6	SCC42415	80063	5	3
NE51	95412	4	8				

LATEST NATIONAL STOCK NUMBER ASSIGNMENTS

STOCK NUMBER	FIGURE NO.	ITEM NO.
5935-00-258-4449	4	7
5355-00-656-1358	2	2
5355-00-656-1358	4	5

LATEST PART NUMBER ASSIGNMENTS

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
MS91525-2	96906	2	2
MS91525-2	96906	4	5
SCDL107431	80063	4	7

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RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL MANUALS



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DATE 10 July 1975

PUBLICATION NUMBER

TM 11-5840-340-12

DATE

23 Jan 74

TITLE

Radar Set AN/SPC-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		
		FO3	

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

Recommend that the installation antenna alignment procedure be changed through 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 for 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 in 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.

TYPED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SSG I. M. DeSpirito 999-1776

SIGN HERE:

SSG I. M. DeSpirito

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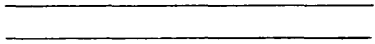
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