

TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL

SUPPORT MAINTENANCE

REPAIR PARTS AND SPECIAL

TOOLS LISTS

(INCLUDING DEPOT MAINTENANCE

REPAIR PARTS AND SPECIAL TOOLS)

FOR

RADAR SET AN/PPS-5A

(NSN 5840-00-453-5662)

HEADQUARTERS, DEPARTMENT OF THE ARMY

SEPTEMBER 1978

TECHNICAL MANUAL

No. 11-5840-298-34P-1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 6, September 1978

DIRECT SUPPORT AND GENERAL
SUPPORT MAINTENANCE REPAIR
PARTS AND SPECIAL TOOLS LISTS
(INCLUDING DEPOT MAINTENANCE REPAIR
PARTS AND SPECIAL TOOLS)
FOR

RADAR SET AN/PPS-5A

(NSN 5840-00-453-5662)

Current as of 24 February 1978

REPORTING OF ERRORS

You can improve this manual by recommending improvements using DA Form 2028-2 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 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 Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-MA-Q, 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	
	II.	Repair parts list	5	
GROUP	0 0	Radar Set AN/PPS-5A	5	1-6
	0 1	Receiver-Transmitter, Radar RT-965/PPS-5A.	25	7
		OIOI T/R assembly	27	8-10
		OIOIOI Local oscillator, R-T.....	41	11
		010102 IF preamplifier	43	12
		010103 AFC preamplifier	45	13
		0102 IF amplifier	49	14
		0103 Amplifier, box car and audio	53	15
		0104 Gate generator	59	16
		0105 Modulator assembly	63	17
		0106 Converter assembly	69	18
		0107 AFC amplifier	73	19

* This manual supersedes TM 11-5840-298-34P-1, 23 May 1972.

Table of Contents—Continued

	Page	Illus Figure
0108 Motor control assembly	79	20
0109 R-T subassembly,	87	21-24
010901 Electronic component assembly E3108	97	25
010902 Relay control	99	26
010903 Range drive assembly	103	27
010904 Enclosure, receiver	109	28
010905 Interlock panel assembly	111	29
Ollo Drive, Antenna AB-992A/PPS-5	115	30-35
011001 Azimuth drive	131	36
011002 Wiring harness	135	37
011003 Counter assembly, azimuth	137	38
011004 Commutator	141	39
02 Control-Indicator, Radar C-4610A/PPS-5	149	40-48
0201 A-display assembly	183	49
0202 B-display assembly	187	50
0203 Power converter	193	51
0204 Amplifier assembly, azimuth servo	197	52
020401 Amplifier subassembly servo.	199	53
020402 Electronic component assembly	201	54
020403 Generator subassembly azimuth.	203	55
0205 RGF assembly	205	56
020501 RGF subassembly	209	57
0206 Range amplifier	211	58
0207 Counter assembly, azimuth	213	59
0208 Extension assembly, range.	215	60
0209 Bezel assembly		61
0210 Component board E3602	223	62
03 Power Supply PP-4450B/PPS-5	229	63
04 Column Assembly, Tripod MX-7565B/PPS-5	233	64
05 Tripod, Radar MT-2958A/PPS-5	237	65
06 Reflector, Antenna AS-2023/PPS-5.	239	66
07 Horn, Waveguide AS-2413/PPS-5A.	241	67
08 Headset, Electrical H-251/U (No parts authorized)		
09 Cable Asembly, Special Purpose, Electrical CX-12004/PPS-5.	243	68
10 Telescope.	245	69
11 Cable Assembly, Special Purpose, Electrical, Branched CX-12068/PPS-5A	247	70
SECTION III. Special tools fist (Not applicable)		
IV. National stock number and part number index.	248	

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 direct support, and general support maintenance of the AN/PPS-5A. 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:

Code	Definition
PA	Item procured and stocked for anticipated or known usage.
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 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:

Code	Application / Explanation
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 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:

Code	Application / Explanation
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.
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.

F—Reparable item. When uneconomically reparable, condemn and dispose at the direct support level.

H—Reparable item. When uneconomically reparable, 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.

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. A "V"

4. Special Information

The following publications pertain to the AN/PPS-5A and its components:

TM 11-5840-298-12, Radar Sets AN/PPS-5 and AN/PPS-5A and AN/PPS-5B

TM 11-5840-298-35, Radar Sets AN/PPS-5 and AN/PPS-5A and AN/PPS-5B

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)