

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE REPAIR PARTS
AND SPECIAL TOOLS LISTS
ROTARY CONVERTERS PU-143/U, PU-143A/U, PU-1 43B/U, PU-1 43D/U;
MOTOR GENERATORS PU-143E/U, PU-143F/U; ROTARY CONVERTERS
PU-140A/U, PU-141/U, PU-141A/U, PU-141 B/U; AND PIONEER MODEL 3K50

Headquarters, Department of the Army, Washington, D.C.
15 November 1974

Current as of 17 September 1974

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¹This manual supersedes TM 11612521420P, 29 October 1962.

<i>Code</i>	<i>Explanation</i>
	the replacement of the next higher assembly.
XB —	Item is not procured or stocked. If not available thorough salvage, requisition.
XC —	Installation drawing, diagram instruction sheet, field service drawing. that is identified by manufacturers' part number.
XD —	Support items can be requisitioned with justification.

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) *Use (third position).* The maintenance code entered in the third position indicates the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position indicates 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 of maintenance.

NOTE

A code "C" may be used in this position to denote crew or operator maintenance performed within organizational maintenance.

F —	Support item is removed, replaced, used at the direct support maintenance level.
H —	Support item is removed, replaced, used at the general support maintenance.
D —	Support items that are removed, replaced, used at depot only.

(b) *Repair (fourth position).* 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). When a maintenance code is not used a dash (-) sign is entered. For multi-service equipment systems or when a code is entered, this position will contain one of the following maintenance codes as assigned by the service(s) that require the code—

<i>Code</i>	<i>Application/Explanation</i>
0 —	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 direct support.
H —	The lowest maintenance level capable of complete repair of the support item is general support.
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 —	Non-repairable. 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 SSMR Code Format as follows—

<i>Code</i>	<i>Explanation</i>
Z —	Nonrepairable item. When unserviceable, condemn and dispose at the level indicated in the first digit of the maintenance code.
O —	Repairable item. When uneconomically repairable, condemn and dispose at organizational level.
F —	Repairable item. When uneconomically repairable, condemn and dispose at the direct support level.
H —	Repairable item. When uneconomically repairable, condemn and dispose at the general support level.
D —	Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.
L —	Repairable 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).

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

c. *Description*. Indicates the Federal item name and a minimum description required to identify the item. The last line indicates the reference number followed by the applicable Federal Supply Code for Manufacturer (FSCM) in parentheses. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government agency, etc., and is identified in SB 708-42.

d. *Unit of Measure (U/M)*. Indicates the standard or basic quantity by which the listed item is used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation; e.g., ea, in, pr, etc., and is the basis used to indicate quantities and allowances in subsequent columns. 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.

e. *Quantity Incorporated in Unit*. This column indicates the quantity of the item used in the equipment. Subsequent appearances of the same item in the same assembly are indicated by the letters "REF".

f. *15-Day Organizational Maintenance Allowance*.

(1) The repair parts indicated by an asterisk in the allowance column represent those authorized for use at the organizational category, and will be requisitioned on an "as required" basis, until stockage is based on demand in accordance with AR 710-2.

(2) Major Army commanders are authorized to approve reduction in the range of support items authorized for use in units within their commands. Recommendations for increase in range of items authorized for use will be forwarded to Commander, US Army Electronics Command, ATTN: AMSELMA-DM, Fort Monmouth, NJ., 07703. Any changes approved will be reflected in a revision to the RPSTL.

(3) Allowance quantities are indicated in the special tools list section for special tools, TMDE, and other equipment.

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

(1) *Figure number*. Not applicable.

(2) *Item number*. Indicates the item number or reference designation used to reference the item.

1-4. Special Information

a. Usable on codes are included in column 3. Uncoded items are applicable to all models. Identification of the usable on codes used in this publication are —

Code	Used on
A7L	PU-143/U
BT7	PU-143A/U
BT8	PU-143B/U
BT9	PU-143D/U
BUA	PU-143E/U
BUB	PU-143F/U
A7J	PU-140A/U
A7K	PU-141/U
BUC	PU-141A/U
BUD	PU-141B/U
BUE	3K50

b. The following publication pertains to the equipment and its components:

TM 11-5507 Rotary Converters PU-134/U, PU-140/U, PU-140A/U, PU-141/U, PU-141A/U, PU-141B/U, PU-143/U, PU-143A/U, PU-143B/U, and PU-143D/U, and Motor-Generators PU-143E/U and PU-143F/U.

1-5. Location of Repair Parts it.

a. This manual contains one cross-reference index (sec V) to be used to locate a repair part when either the Federal stock number or reference number (manufacturer's part number) is known. The first column in the index is prepared in numerical or alphanumeric sequence in ascending order. The reference numbers (manufacturer's part numbers) are listed immediately following the last listed Federal stock number in the index of Federal stock numbers.

b. When the Federal stock number or reference number is known, follow the procedures given in (1) and (2) below.

(1) Refer to the index of Federal stock numbers (sec V) and locate the Federal stock number or reference number. The FSN and reference number are cross-referenced to the applicable figure and item number or reference designation.

(2) Refer to the repair parts list (sec III) and locate the figure number (col 7a) and item number or reference designation (col 7b) as noted in the FSN index.

c. When the figure and item number or reference designation are known, scrutinize columns 7a and 7b of the repair parts list (sec III) until the item is located.

d. When the FSN, reference number, figure number, item number and reference designation are not known, scrutinize column 3 of the repair parts list (sec III), which is arranged in alphabetical order.

1-6. Abbreviations

Not applicable.

1-7. Reporting of Equipment Publication Improvements

The reporting of errors, omissions, and recommendations for improving this publication by the

individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-DM, Fort Monmouth, N.J., 07703.

SECTION III

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW				(7) ILLUS- TRATION	
					(a)	(b)	(c)	(d)	(a)	(b)
					1-5	6-20	21-50	51-100	FIG. NO.	ITEM NO.
XDOZZ		GROUP 0001 ROTARY CONVERTER PU-140A/U BRUSH, ELECTRICAL CONTACTE2 AC SCD99875-22 (80063) A7J	EA	2	*	*	*	*	*	E2
XDOZZ		BRUSH, ELECTRICAL CONTACT E3 AC SCD9875-22 (80063) A7J	EA	REF	*	*	*	*		E3
PAOZZ	5977-232-6085	BRUSH, ELECTRICAL CONTACT E4 DC SCD99875-3 (80063) A7J	EA	2	*	*	*	*		E4
PAOZZ	5977-232-6085	BRUSH, ELECTRICAL CONTACT E5 DC SCD99875-3 (80063) A7J	EA	REF		*	*	*		E5
GROUP 0002 ROTARY CONVERTERS 3K50 AND PU-141 SERIES										
PAOZZ	5935-199-3178	CONNECTOR, RECEPACEL, ELECTRICAL J1 7255 (74545) BUE	EA	1	*	*	*	*		J1
PAOZZ	5977-232-6081	BRUSH, ELECTRICAL CONTACT E2 AC SCD59985-6 I800631 BUE	EA	2	*	*	*	*		E2
PAOZZ	5977-232-6081	BRUSH, ELECTRICAL CONTACT E3 AC SCD99875-6 (80063) BUE	EA	REF	±	*	*	*		E3
PAOZZ	5977-232-5269	BRUSH, ELECTRICAL CONTACT E4 SCD99875-9 180063) BUE	EA	2	*	*	*	*		E4
PAOZZ	5977-232-5269	BRUSH, ELECTRICAL CONTACT ES DC SC099875-9 IO80063) BUE	EA	REF		*	*	*	*	E5
PAOZZ	5977-194-9695	BRUSH, ELECTRICAL, CONTACTE2 AC SCD99875-4 (80063) A7K	EA	2	*	*	*	*		E2
PAOZZ	5977-194-9695	BRUSH, ELECTRICAL, CONTACTE3 AC SCD0998B15-4 80063) A7K	EA	REF	*	*	*	*		E3
PAOZZ	5977-230-6032	BRUSH, ELECTRICAL CONTACT E4 5CD99875-11 (800631 A7K, BUE	EA	2	±	*	*	*		E4
PAOZZ	5977-230-6032	BRUSH, ELECTRICAL CONTACT ES SCD099875-11 (80063) A7K BUD	EA	REF	*	*	*	*		E5
XDOZZ		BRUSH, ELECTRICAL CONTACT NO-REF-DESIG...EA GOVERNOR BR C755A (91475) A7K,BUD	EA	2	*	*	*	*		
PAOZZ	5977-228-7096	BRUSH, ELECTRICAL CONTACT E4 OC SCD99875-10 180063) BUC	EA	4	*	*	*	*		E4
PAOZZ	5917-228-7096	BRUSH, ELECTRICAL CUNTACT E5 ..DC EA REF SCD99875-10 180063) BUC			*	*		*		E5
PAOZZ	5977-228-7096	BRUSH, ELECTRICAL CONTACT E2 AC SCD105822-8 (80063) BUC	EA	4	*	*	*	*		E2
PAOZZ	5977-228-7097	BRUSH, ELECTRICAL CONTACT E3 AC SCD10522-8 (80063) BUC	EA	REF	*	*	*	*		E3
XDOZZ		BRUSH, ELECTRICAL CONTACT E2 AC SCD99875-8 (80063) BUD	EA		*	*	*	*		E3
XDOZZ		BRUSH, ELECTRICAL CONTACT E3 AC SCD99875-8 (80063) BUD	EA	REF	*	*	*	*		E3
XDOZZ		MOUNT VIBRATION MP11 A246-53 (97475) A7K BUD	EA	4	*	*	*	*		MP11
XDOZZ		SPRING, HELICAL, EXTENSION E6 DC BRUSH A168-1068 (97475)A7K	EA	2	*	*	*	*		E6
XDOZZ		SPRING, HELICAL, EXTENSION E7 AC A168-833 (97475) A7K	EA	2	*	*	*	*		E7
XDOZZ		SPRING, SPIRAL TORSION E7 AC BRUSH Y1763L (32770) BUC	EA	2	*	*	*	*		E7

SECTION III

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE	(4) UNIT OF MEAS USABLE ON CODE	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW				(7) ILLUS- TRATION	
					(a)	(b)	(c)	(d)	(a)	(b)
					1-5	6-20	21-50	51-100	FIG. NO.	ITEM NO.
		GROUP 0003 ROTARY CONVERTERS PU-143 SERIES-								
PAOZZ	5935-161-9764	COPNNECTOR RECEPTACLE, ELECTRICAL J1 7210 (74545)A7L,BT7	EA	1	*	*	*	*	*	J1
PAOZZ	5935-259-3326	CONNECTOR, RECEPTACLE, ELECTRICAL J1 7535 (74545)BT8,BT9,BOA,BUB	EA	1	*	*	*	*	*	J1
XDOZZ		KNOB MP9 5150 (44655)BT8,BT9,BUA,BUB	EA	1	*	*	*	*	*	MP9
		GROUP 0004 MOTOR GENERATOR SECTION								
PAOZZ	5977-230-6032	BRUSH, ELECTRICAL CONTACT E4 DC SCD99875-11 (80063)	EA	2	*	*	*	*	*	E4
PAOZZ	5977-230-6032	BRUSH, ELECTRICAL CONTACT E5 DC SCD99875-14 (80063)	EA	REF	*	*	*	*	*	E5
PAOZZ	5917-194-9695	BRUSH, ELECTRICAL CONTACT E2 AC SCD99875-14 (80063) A7L	EA	2	*	*	*	*	*	E2
PAOZZ	5977-194-9695	BRUSH ELECTRICAL CONTACT E3 AC SCD99875-14 (80063)	EA	REF	*	-	*	*	*	E3
PAOZZ	5977-232-6081	BRUSH, ELECTRICAL CONTACT E2 AC SC099615-6 (80063)BT7,BT8	EA	2	*	-	*	*	*	E2
PAOZZ	5977-232-6081	BRUSH. ELECTRICAL CONTACT E3 AC SCD99875-6 (80063)BT7,BT8	EA	REF	*	*	*	*	*	E3
PAOZZ	5917-232-5269	BRUSH, ELECTRICAL CONTACT E4 AC SCD99875-9 (80063)BT7, BT8	EA	2	*	*	*	*	*	E4
PAOZZ	5977-519-6043	BRUSH ELECTRICAL CONTACT E5 DC SMB328135 (80063)BT9,BCA,BUB	EA	REF	*	*	*	*	*	E5
PAOZZ	5977-519-6043	BRUSH, ELECTRICAL CONTACT E2 AC SMB32135 (80063)BT9,BUA,BUB	EA	2	*	*	*	*	*	E2
PAOZZ	5977--519-6043	BRUSH,ELECTRICAL CONTACT E3 AC SMB328134 (80063)BT9,BUA,BUB	EA	REF	*	*	*	*	*	E3
PAOZZ	5977-519-6042	BRUSH, ELECTRICAL CONTACT E4 DC SMB328134 (80063)BT9,BUA,BUB	EA	2	*	*	*	*	*	E4
PAOZZ	5917-519-6042	BRUSH, ELECTRICAL CONTACT ES DC SMB3288134 (80063)BT9,BUA,BUB	EA	REF	*	*	*	*	*	E5
XDOZZ	E6	SPRING HELICAL, EXTENSION E6 DC A168-1068 (97475)	EA	2	*	*	*	*	*	E6
XDOZZ	E7	SPRING HELICAL EXTENSIONE7 E7 AC A168-833 (19475)	EA	2	*	*	*	*	*	E7
XDOZZ	E7	SPRING, SPIRAL TORSION E7 AC SMB328044 (80063)BT7,BT9,BUB	EA	2	*	*	*	*	*	E7

SECTION V

INDEX - FEDERAL STOCK NUMBEK AND REFERENCE NUMBER
 CHOSS-REFERENCE TO FIGURE AND ITEM NUMBER

STOCK NUMBER	FIGURE NO	ITEM NO	STOCK NUMBER	FIGURE NO	ITEM NO.
			5977-230-6032		ES
			5977-232-5269		E4
			5977-232-5269		ES
			5977-232-6081		E2
5935-161-9764		J1	5977-232-6081		E3
5935-199-3178		J1	5977-232-6085		E4
5935-259-3326		J1	5977-232-6085		E5
5977-194-9695		E2			
5977-191-9695		E3			
5977-22d-7096		E4			
5977-228-7096		E5			
5977-22d-1097		E2			
5977-22H-1097		E3	5977-519-604Z		E4
5977-519-6042		E5			
5977-519-6043		E2			
5977-230-6032		E4	5977-519-6043		E3

REFERENCE NO	NO LODE	FIG NO	ITEM NO	REFERENCE NO	MFR CODE	FIG NO	ITEM NO.
A168-1068	97475		E6	SCD99875-4	80063		E3
A168-833	97415		E7	SCD99875-6	80063		E2
A246-531	97475		MP11	SCD99875-	d8006)		E3
C755A	97415			SCD99875-8	80063		E2
SCL005822-6	80063		E2	SCD99875-6	80063		E3
SCJ105822-8	80063		E3	SCD99875-9	80063		E4
SC099875-10	80063		E4	SCD99875-9	80063		E5
SCD99d75-10	8053		E5	SM8328044	80063		E7
SC099875-11	80063		E4	SM8328134	80063		E4
SCD99875-11	80063		E5	SM8328134	80063		E5
SCD99875-14	80063		E2	SM8328135	80063		E2
SC099875-22	80063		E3	SM6328L35	80063		E3
SC099875-22	80063		E2	Y1763L	32770		E7
SC099875-22	80063		E3	5150	44655		MP9
SCD99b75-3	80063		E4	7210	74545		J1
SC099875-3	80303		ES	7255	74545		J1
SC099d75-4	80063		E2	7535	74545		J1

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USASESS (5)	USARMIS (1)
IUSAADS (2)	Units org under fol TOE: (1 cy each)
USAFAS (2)	11-16
USAARMS (2)	11-98
USAIS(2)	11-117
USAES (2)	11-500 (AA-AC)

NG: None

USAR: None

For explanation of abbreviations used, see AR 31-50.

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