DEPARTMENT OF THE ARMY TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE

REPAIR PARTS AND SPECIAL TOOLS LIST

FOR

QUADRATURE GENERATOR, ELECTRONIC SCIENTIFIC INDUSTRIES

MODEL RA79 (NSN 6625-00-992-2994)

Current as of 5 December 1979

Headquarters, Department of the Army, Washington, DC
4 January 1980

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Section I. INTRODUCTION

1. Scope. This manual lists spares and repair parts that are required for maintenance of the Quadrature Generator, Electronic Scientific Industries, RA79. 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 (RPSTL) is divided into the following sections:

a. Section I. Introduction.

b. 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. Bulk materials are listed in National Stock Number (NSN) sequence.

c. Section III. NSN and Part Number Index. A list, in National Item Identification Number (NIIN) sequence, of all NSN's appearing in the listings, followed by a list in alphameric sequence of all part numbers appearing in the listings. NSN's 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.
PB -	Item procured and stocked for insurance purpose 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 stocked 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 kit 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 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 organizational level.

AF - Item to be assembled at direct support maintenance level.

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 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

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, or 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

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 (enter applicable designated specialized repair activity), 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:

Recoverability Codes Definition

Z - Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.

O - Reparable item. When uneconomically reparable, condemn and dispose at organizational level.

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.

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 (NSN). Indicates the NSN assigned to the item and which will be used for requisitioning.

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 item 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. The physical security classification of the item is indicated by the parenthetical entry (insert applicable physical security classification abbreviation, e.g., Phy Sec C1 (C) -Confidential, Phy Sec C1 (S) -Secret, Phy Sec C1 (T) -Top Secret). Items that are included in kits and sets are listed below the name of the kit or set with the quantity of each item in the kit or set indicated in the quantity incorporated in unit column. When the part to be used differs between serial numbers of the same model, the effective serial numbers are shown as the last line of the description. In the Special Tools List, the initial basis of issue (BOI) appears as the last line in the entry for each special tool, special Test, Measurement, and Diagnostic Equipment (TMDE), and other special support equipment. When density of equipments supported exceeds density spread indicated in the BOI, the total authorization is increased accordingly.

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" appearing in this column in lieu of quantity indicates that no specific quantity is applicable (e.g., shims, spacers, etc).

4. Special Information

a. Repair parts for components of standards sets which can be identified as existing in the supply system will be requisitioned through normal supply channels from the appropriate supply commodity manager.

b. Repair parts for components of standards sets which cannot be identified as to proper supply source will be requisitioned from USAMICOM, using routing identifier B64 and furnishing as a minimum, the following as exception data.

(1) Component stock number of the individual end item to be repaired.

(2) Component manufacturer's equipment model number and serial number.

(3) The equipment manufacturer's stock number as listed in the appropriate manual for the desired repair part.

(4) The repair part reference designation, circuit reference, circuit symbol schematic designation, or reference number as listed in the manufacturer's manual.

(5) The technical specification of the repair part as contained in the appropriate manufacturer's manual.

(6) The title and date of the manufacturer's manual from which the information in paragraphs a, b(3), (4), and (5) above was taken.

NOTE

Repair parts should not be requisitioned for plug-in boards identified in the plug-in board exchange program, except by the depot designated to perform the repair. Repair of calibration set components, with plug-in board assemblies or subassemblies designated as program exchange replacements with a recoverability code of L, will be accomplished by replacing the plug-in board.

c. The plug-in board exchange program functions are as follows:

(1) Requisitioning instructions for initial issue plug-in boards will be provided since new instrument boards are included in the program.

(2) As a plug-in board covered by the program fails, a replacement will be requisitioned. Requisitions will be submitted to Commander, US Army Missile Command, B64, Redstone Arsenal, AL 35809.

(3) Simultaneously with c(2) above, the defective board being replaced will be shipped by certified mail, return receipt requested, to the following address:

Transportation Officer
Anniston Army Depot
M/F Field Service Stock
Anniston, AL 36201

When requisitioning a replacement board, the turn-in document number of the replaced board shall be cited on the requisition.

5. How to Locate Repair Parts

a. When NSN or reference number is unknown:

(1) First. Using the table of contents, determine the assembly (functional group) within which the repair part belongs.

(2) Second. Using the repair parts listing, find the functional group to which the repair part belongs and locate the item by description.

b. When NSN or reference number is known:

(1) First. Using the index of NSN's and reference numbers, find the pertinent NSN or reference number. This index is in ascending NSN cross-referenced to the illustration figure number and item number.

(2) Second. Using the repair parts listing, find the figure and item number, and locate the figure and item number in the repair parts list.

6. Abbreviations. The abbreviations listed below may appear in this RPSTL:

AC	alternating current
ACC	accordance
ACCUR	accuracy
AL	aluminum
AMP	ampere
ASSY	assembly
ASTM	American Standard for Testing Materiel
ATTEN	attenuation
AWC	American Wire Gage
BAN	banana
BLK	black
BR	brass
C	centigrade, calibration, cycles per second
CAL	calibrate
CAP	capacitance
CD	code
CER	ceramic
COAX	coaxial
COMP	composition
COND	conductor
CONN	connector
CONS	consisting
CONT	continual
COP	copper
COR	corrosion
CPS	cycles per second
CU	cubic
CUR	current
CYL	cylinder
DB	decibel
DBL	double
DC	direct current
DEG	degree
DET	detector
DIA	diameter
DIM	dimension
DIV	division
DPDT	double pole double throw
DPL	deployment
ELEC	electrical
EQUIPM	equipment
F	Fahrenheit
FED	Federal
FIN	finish
FLG	flange
FREQ	frequency
FSCM	Federal supply code for manufacturers
FT	foot
GC	gigacycles
GEN	generator
GHZ	gigahertz
GPM	gallons per minute
GRAD	graduation
H	high
HD	head
HYDR	hydraulic
HZ	hertz
ID	inside diameter
IN	inch
INCL	inclusive
K	thousand (prefix)
KC	kilocycles
KG	kilograms
KHZ	kilohertz
KMHZ	thousand megahertz
KV	kilovolts
LAB	laboratory
LB	pounds
LC	length
LT	light

M	thousand
MA	milliampere
MAX	maximum
MC	megacycles
MFD	millfarads
MFR	manufacturer
MG	milligrams
MHZ	megahertz
MIN	minimum, minutes
ML	milliliters
MM	millimeters
MOD	modified
MSEC	milliseconds
MTL	material
MV	millivolts
MW	milliwatts
NBS	National Bureau Standards
NEG	negative
NO	number
NOM	nominal
NPT	National Pipe Thread
NSN	National stock number
OA	overall
OD	outside diameter
OPER	operating
OZ	ounce
PCS	pieces
PCT	percent
PF	picofarads
PK	peck
PLTD	plated
PN	part number
POS	positive
PP	peak to peak
PSI	pounds per square inch
PWR	power
REF	reference
REP	repetition
REQ	required
REQMTS	requirements
RES	resistance
RF	radio frequency
RG	range
RH	right hand
RL	reel
RM	rack mounted
RMS	root mean square
ROT	rotating
RPM	revolutions per minute
S	single
SEC	seconds
SECT	section
SERR	serrated
SHK	shank
SNG	single
SPEC	specification
SPL	special
SQ	square
STD	standard
STGT	straight
SW	switch
SWR	standing wave ratio
SYS	system
TEL	telescopic
TERM	terminal
THD	thread
THERM	thermometer
THK	thick
TSTR	tester
U	unit
UF	microfarads
UHF	ultra high frequency
V	volts
VAC	volts alternating current, vacuum
VDC	volts direct current
VHF	very high frequency
VSWR	voltage standing wave ratio
W	watts, with, width
WT	weight

SECTION II. REPAIR PARTS LIST

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) *USABLE ON CODE*	(7) U/M	(8) QTY INC UNIT
						GROUP 7004		
						GENERATOR, QUADRATURE		
						RA79 11837		
						7915948 18876		
1	10	PAFZZ	4935-00-073-3113	1393	11837	BINDING POST	EA	19
1	20	PAFZZ	4935-00-761-8900	1170	11837	CAP, BINDING POST	EA	12
1	30	PAFZZ	4935-00-073-3112	1172	11837	CAP, BIND, POST	EA	7
1	40	PAFZZ	5910-00-864-8337	TE1137	80183	CAPACITOR, FIXED, ELE	EA	3
1	50	PAFZZ	5910-00-986-7470	TE1163	56289	CAPACITOR, FIXED ELE	EA	1
1	60	PAFZZ	5910-00-660-9135	423	84171	CAPACITOR, VARIABLE	EA	1
1	70	PAFZZ	5910-00-759-0070	1411	11837	CAPACITOR, TEST SET	EA	1
1	80	PAFZZ	5910-00-921-1378	1415	11837	CAPACITOR, FIXED PLASTIC	EA	1
1	90	PAFZZ	5910-00-756-4428	30D405F150CC4	56289	CAPACITOR, FIXED ELE	EA	1
1	100	PAFZZ	5910-00-780-9984	BR60-250	14655	CAPACITOR, FIXED ELE	EA	1
1	110	PAFZZ	5910-00-431-8162	TE1160	56289	CAPACITOR, FIXED ELE	EA	1
1	120	PAFZZ	5355-00-953-8880	1266	11837	KNOB	EA	3
1	130	PAFZZ	6625-00-858-9545	8925	11837	METER, ARBITRARY	EA	1
1	140	PAFZZ	5905-00-110-0196	RCR20G102JS	81349	RESISTOR, FIXED COMP	EA	4
1	150	PAFZZ	5905-00-110-0310	RCR20G392JS	81349	RESISTOR, FIXED, COMP	EA	1
1	160	PAFZZ	5905-00-141-1071	RCR20G474JS	81349	RESISTOR, FIXED, COMP	EA	1
1	170	PAFZZ	5905-00-141-1168	RCR20G222JS	81349	RESISTOR, FIXED, COMP	EA	1
1	180	PAFZZ	5905-00-104-8334	RCR20G331JS	81349	RESISTOR, FIXED, COMP	EA	1
1	190	PAFZZ	5905-00-247-8682	RCR20G825JS	81349	RESISTOR, FIXED, COMP	EA	1
1	200	PAFZZ	5905-00-072-0647	EB1061	01121	RESISTOR, FIXED, COMP	EA	1
1	210	PAFZZ	5905-00-795-0771	EB1031	01121	RESISTOR, FIXED COMP	EA	2
1	220	PAFZZ	5905-00-104-8348	RCR20G332JS	81349	RESISTOR, FIXED, COMP	EA	1
1	230	PAFZZ	5905-00-106-9351	RCR20G273JS	81349	RESISTOR, FIXED COMP	EA	1
1	240	PAFZZ	5905-00-106-9344	RCR20G101JS	81349	RESISTOR, FIXED, COMP	EA	1
1	250	PAFZZ	5905-00-924-9249	3067S1-101	80294	RESISTOR, VARIABLE	EA	1
1	260	PAFZZ	5905-00-858-7209	8960	11837	RESISTOR, FIXED WIREWOUND	EA	1
1	270	PAFZZ	5905-00-858-7215	8959	11837	RESISTOR, FIXED WIREWOUND	EA	1
1	280	PAFZZ	5905-00-110-0196	EB1021	01121	RESISTOR, FIXED COMP	EA	3
1	290	PAFZZ	5961-00-837-9288	JAN1N3029B	81349	SEMICONDUCTOR DEVICE	EA	2
1	300	PAFZZ	5961-00-924-6981	JAN1N4245	81349	SEMICONDUCTOR DEVICE	EA	4
1	310	PAFZZ	5961-00-460-0983	JAN1N4954	81349	SEMICONDUCTOR DEVICE	EA	2
1	320	PAFZZ	5930-00-655-1515	MS35058-23	96906	SWITCH, TOGGLE	EA	1
1	330	PAFZZ	5940-00-450-6887	3247	11837	TERMINAL, LUG	EA	3
1	340	PAFZZ	5961-00-222-3698	48538-1	65597	TRANSISTOR	EA	5

SECTION III. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

STOCK NUMBER	FIGURE NO.	ITEM NO.
5905-00-072-0647	1	200
4935-00-073-3112	1	30
4935-00-073-3113	1	10
5905-00-104-8334	1	180
5905-00-104-8348	1	220
5905-00-106-9344	1	240
5905-00-106-9351	1	230
5905-00-110-0196	1	140
5905-00-110-0310	1	150
5905-00-141-1071	1	160
5905-00-141-1168	1	170
5905-00-247-8682	1	190
5910-00-431-8162	1	110
5940-00-450-6887	1	330
5961-00-460-0983	1	310
5930-00-655-1515	1	320
5910-00-660-9135	1	60
5910-00-756-4428	1	90
5910-00-759-0070	1	70
4935-00-761-8900	1	20
5910-00-780-9984	1	100
5905-00-795-0771	1	210
5961-00-837-9288	1	290
5905-00-858-7209	1	260
5905-00-858-7215	1	270
6625-00-858-9545	1	130
5910-00-864-8337	1	40
5910-00-921-1378	1	80
5961-00-924-6981	1	300
5905-00-924-9249	1	250
5355-00-953-8880	1	120
5910-00-986-7470	1	50

PART NUMBER	FSCM	FIG. NO.	ITEM NO.
BR60-250	14655	1	100
EB1021	01121	1	280
EB1031	01121	1	210
EB1061	01121	1	200
JAN1N3029B	81349	1	290
JAN1N4245	81349	1	300
JAN1N4954	81349	1	310
MS35058-23	96906	1	320
RCR20G101JS	81349	1	240
RCR20G102JS	81349	1	140
RCR20G222JS	81349	1	170
RCR20G273JS	81349	1	230
RCR20G331JS	81349	1	180
RCR20G332JS	81349	1	220
RCR20G392JS	81349	1	150
RCR20G474JS	81349	1	160
RCR20G825JS	81349	1	190
TE1137	80183	1	40
TE1160	56289	1	110
TE1163	56289	1	50
1170	11837	1	20
1172	11837	1	30
1266	11837	1	120
1393	11837	1	10
1411	11837	1	70
1415	11837	1	80
30D405F150CC4	56289	1	90
3067S1-101	80294	1	250
3247	11837	1	330
423	84171	1	60
48538-1	65597	1	340
8925	11837	1	130
8959	11837	1	270
8960	11837	1	260

5905-00-110-0196	1	280
5961-00-222-3698	1	340

By Order of the Secretary of the Army:

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Distribution:
To be distributed in accordance with DA Form 12-34A, requirements for Calibration Procedures Publications.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1980--640217/313