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DEPARTMENT OF THE ARMY TECHNICAL MANUAL

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## Operator's Repair Parts and Tool List

for

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FREQUENCY SHIFT CONVERTER CCV-116/URR, CV 116A, B, C/URR

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Headquarters, Department of the Army, Washington 25, D. C.

4 August 1958

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SECTION I  
INTRODUCTION

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**1. Scope**

*a. General.* The manual lists items supplied for initial operation and for running spares and accessories. The list includes tools, accessories, and similar material issued as part of the major end item. This portion lists the basic allowance data for parts and accessories required for maintenance of this equipment. End items of equipment are issued on the basis of allowances prescribed in equipment authorization tables and other documents which are a basis for requisitioning.

*b. Columns.*

- (1) *Federal stock number.* The stock number column lists the 11-digit Federal stock number assigned by the Cataloging Division, OASD (S & L).
- (2) *Designation by model.* Each subdivision- of this column is used for a specific model or for groups of equipment -a noted. A dagger (†) indicates the part is used in that model.
- (3) *Description.* Nomenclature or the standard item name and brief identifying data for each item is listed in this column. When requisitioning, enter the nomenclature and description.
- (4) *Unit of Issue.* The unit of issue is the supply term applied to the smallest quantity by which the individual item is counted for

procurement, storage, requisitioning, allowances, and issue purposes.

- (5) *Expendability.* Expendable items are indicated by the letter X; non-expendable items are indicated by NX.
- (6) *Quantity authorized.* Under "Items Comprising an Operable Equipment" the column lists the quantity of items supplied for the initial operation of the equipment. Under "Running Spares and Accessories" the quantities listed are those issued initially with the equipment as spare parts.. The quantities are authorized to be kept on hand by the operator for maintenance of the equipment.
- (7) *Illustration.* The item number column lists the reference symbols used for identification of the items in the manual in which the item appears.

**2. Maintenance Allocation Chart**

A maintenance allocation chart showing all repair operations authorized to be performed by the respective echelons of maintenance appears in TM 11-5815-221-20-20P.

**3. Critical Items**

High mortality items are designated by a zero slash "Ø" preceding the standard item name in the description column.

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**4. Abbreviations**

ac.....alternating current  
kc.....kilocycle  
ph.....phase

discrepancies in this manual will be prepared on DA form 2028 and forwarded direct to Commanding Officer, U. S. Army Signal Equipment Support Agency, Fort Monmouth, N. J., ATTN: SIGFM/ES-ML.

**5. Comments or Suggestions**

Any comments concerning omissions and

**SECTION II  
FUNCTIONAL PARTS LIST**

By Order of *Wilber M. Brucker*, Secretary of the Army:

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USA Arctic Test Bd (1)	Sig Fld Maint Shops (3)	17-51 (2)
USCON ARC (5)	Sig Lab (5)	17-55 (2)
US ARADCOM (2)	Mil Dist (1)	17-55 (2)
US ARADCOM Rgn (2)	USA Corps (Res) (1)	20-45 (2)
OS Maj Comd (5)	Sectors, USA Corps (Res) (1)	20-46 (2)
Log Comd (5)	JBUSMC (2)	20-300 (2)
MDW (1)		30-15 (2)
Armies (5)	Units org under fol TOE:	30-19 (2)
Corps (2)	5-225 (2)	32-51 (2)
Div (2)	5-226 (2)	32-55 (2)
USATC (2)	5-348 (2)	32-56 (2)
Ft & Camps (2)	6-315 (2)	39-51 (2)
Sve Colleges (5)	6-317 (2)	39-61 (2)
Br Sve Sch (5) except	6-545 (2)	39-71 (2)
USASCS (25)	6-558 (2)	44-12 (2)
Gen Depots (2) except	6-635 (2)	44-35 (2)
Atlanta Gen Depot (None)	7-52 (2)	44-36 (2)
Sig Sec, Gen Depots (10)	11-5 (2)	44-85 (2)
Sig Depots (17)	11-7 (2)	44-86 (2)
Fld Comd AFSWP (5)	11-15 (2)	44-101 (2)
Engr Maint Cen (1)	11-16 (2)	44-535 (2)
Army Pictorial Cen (2)	11-17 (2)	44-536 (2)
WRAMC (1)	11-18 (2)	44-537 (2)
AFIP (1)	11-55 (2)	
AMS (1)	11-57 (2)	

*NG*: State AG (6); units-same as Active Army except allowance is one copy to each unit.

*USAR*: None

For explanation of abbreviations used, see AR 320-50.

OPERATOR'S REPAIR PARTS AND TOOL LIST

FREQUENCY SHIFT CONVERTER CV-116/URR, CV-116A, B, C/URR

TM 11-5815-221-10P  
TO 31R1-2URR-321  
CHANGES NO. 1

DEPARTMENTS OF THE ARMY  
AND THE AIR FORCE  
WASHINGTON 25, D. C., 16 August 1960

TM 11-5815-221-10p, 4 August 1958 is changed as follows:

Page	Action	1 Federal or technical service Stock No.	3 Designation by model				4 Description	5 Unit of issue	6 Ex- pend- ability	7 Quan- tity author- ized
			1	2	3	4				
						ITEMS COMPRISING AN OPER- ABLE EQUIPMENT				
1	Add items.....	Order thru AGC.	(†)	(†)	(†)	(†)	TECHNICAL MANUAL TM 11-2241.	ea	X	2
		Order thru AGC.	(†)	(†)	(†)	(†)	TECHNICAL MANUAL TM 11-5815- 221-10P.	ea	X	2
	Change columns 1 and 4.	5960-262-0152 (5960-166-7676)	(†)	(†)	(†)	(†)	Ø ELECTRON TUBE: MIL type JAN 6AU6WA Item No.: V1, V4, V5, V7, V10, V17, V18, V20, V27, V30, V31, V33.			
		5960-262-0185 (5960-188-0857)	(†)	(†)	(†)	(†)	Ø ELECTRON TUBE: MIL type JAN 5726/6AL5W Item No.: V6, V8, V11, V19, V21, V22, V32, V37.			
2	Change column 4..	5960-646-4615					SHIELD, ELECTRON TUBE: bayonet type; type TS102U03 w/ad- dition of black oxide treatment.			
	Delete item.....	5960-264-3004					SHIELD, ELECTRON TUBE * * *			
	Add item.....	5960-564-4755	(†)	(†)	(†)	(†)	SHIELD, ELECTRON TUBE: f/tube type #5814 heat dissipating; Collins part/dwg #5415554003.	ea	X	15
							RUNNING SPARES AND ACCES- SORY ITEMS			
	Change columns 1 and 4.	5960-262-0152 (5960-166-7676)					Ø ELECTRON TUBE: MIL type JAN 6AU6WA Item No.: V1, V4, V5, V7, V16, V17, V18, V20, V27, V30, V31, V33.			
	Change columns 1 and 4.	5960-262-0185 (5960-188-0857)					Ø ELECTRON TUBE: MIL type JAN 5726/6AL5W Item No.: V6, V8, V11, V19, V21, V22, V32, V34, V37.			

Parentheses indicate old stock number proceeded by new.

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MDW (1)	11-55	20-46
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copies each	11-95	32-57
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11-15	11-587	57

NG: State AG (3); Units-same as Active Army except allowance is one copy to each unit.

USAR: None

For explanation of abbreviations used, see AR 320-50.

GPO 906-410

CHANGE

No. 2

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
Washington, DC, 30 August 1982

**OPERATOR'S REPAIR PARTS AND TOOL LIST FOR  
FREQUENCY SHIFT CONVERTER CV-116/URR, CV-116A, B. C/URR  
(NSN 5815-00-519-6962)**

TM 11-5815-221-10P, 4 August 1958, is changed as follows:

Page 2. Section III is added after section II.

### SECTION III

CROSS REFERENCE INDEX. The Cross-Reference Index is a cross-reference listing of part number to National Stock Number.

a. Use of Cross-Reference Index . To order a part listed in the Cross-Reference Index, note part number and then cross-reference that part number to the National Stock Number in the cross-reference index. Then order through normal ordering channels.

b. Ordering Part Numbers Without National Stock Number . If the part number does not have a National Stock Number, then order the part through normal ordering channels using the part number and the FSCM.

## CROSS REFERENCE INDEX

## Parts With AN FSN

FSN	NEW NSN	FSCM	PART NUMBER
59951616436	5995001616436	80058	CG-409A/U
59601667676	5960001667676	81349	6AU6WA
59601667676	5960001667676	81349	6AU6WA
59601880806	5960001880806	81349	6BA7
59601880806	5960001880806	81349	6BA7
59601880857	NONE	81349	5726/6AL5W
59601880857	NONE	81349	5726/6AL5W
59601880880	NONE	81349	6X4W
59601880880	NONE	81349	6X4W
59201890846	NONE	81349	FO2G3ROOA
59201890846	NONE	81349	FO2G3ROOA
59602120210	NONE	81349	5814A
62402239100	6240002239100	81349	M15098-10-001
62402239100	6240002239100	81349	M15098-10-001
59602483089	NONE	81349	6005/6AQ5W
59602483089	NONE	81349	6005/6AQ5W
59602620210	5960002620210	81349	5814A
59602643004	5960002643004	81349	TS103U02
59952675085	5995002675085	80058	CR-25/U 405KC
59552675086	5955002675086	80058	CR-25/U 425.7KC
5815-519-6962	5815-00-519-6962	80058	CV116A,B,C/URR
59956423049	5995006423049	80058	CX-2491/U
59606464579	NONE	81349	TS102U01
59606464615	5960006464615	81349	TS103U02
59606464616	5960006464616	81349	TS102U02
59606464617	NONE	81349	TS103U03



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