# TM 11-3895-203-15

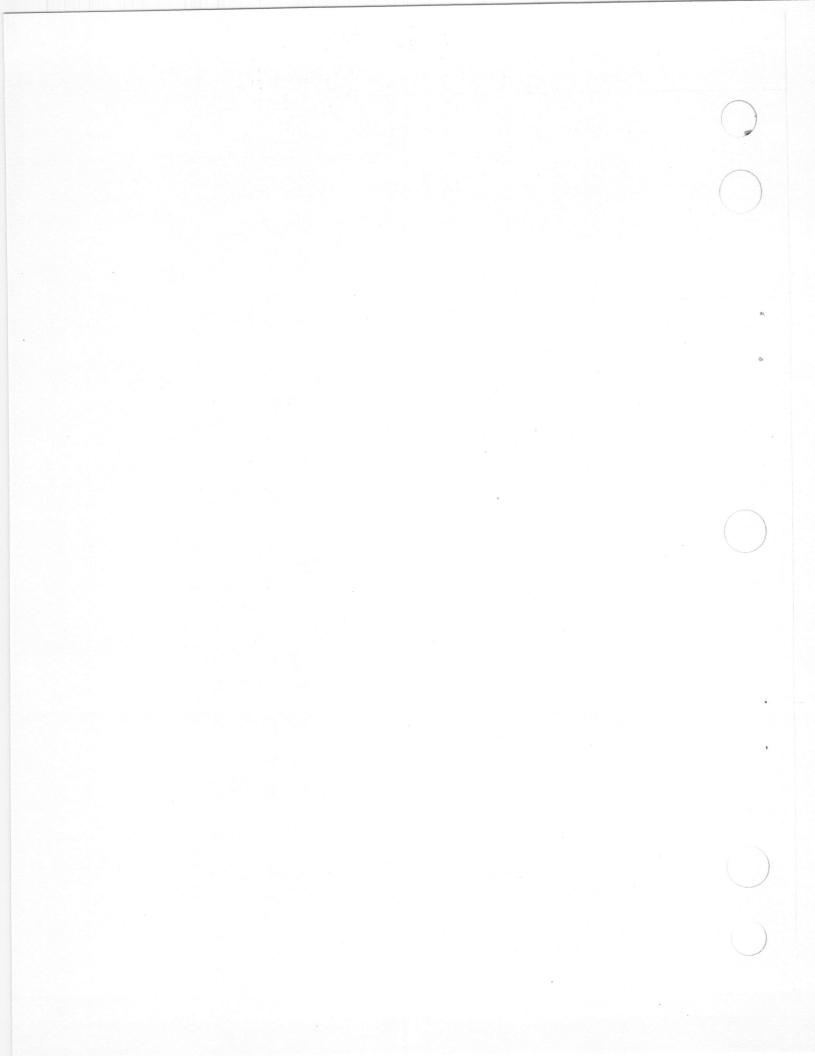
DEPARTMENT OF THE ARMY TECHNICAL MANUAL

# ORGANIZATIONAL, DS, GS, AND DEPOT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST

# REEL EQUIPMENT CE-11

This copy is a reprint which includes current pages from Changes 1 through 3.

HEADQUARTERS, DEPARTMENT OF THE ARMY
APRIL 1967



TM 11-3895-203-15 C 3

CHANGE NO. 3 HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 1 January 1988

Operator's, Organizational, DS, GS and Depot Maintenance Manual REEL EQUIPMENT CE-11 (NSN 5805-00-407-7722)

TM 11-3895-203-15, 11 April 1967, is changed as follows:

Page 9, paragraph 3-1a. In line 1, "daily" is changed to read "weekly."

Page 12, paragraph 4-7 is added after 4-6.

## 4-7. Readiness Reporting

If any of the below mentioned components do not work, is missing or broken, the CE-11 or TA-1/PT and RL-39 is not mission ready:

TA-1/PT operational check cannot be completed due to:

- a. Not transmitting.
- b. Not receiving.
- c. No incoming ring received.
- d. No outgoing ring received, distant station.
- e. Volume knob missing or cannot be adjusted properly.

RL-39 not complete or fully mission available if:

- a. Strat ST-34 and TS-35 is missing.
- b. Axle is missing.
- c. Handle is missing.
- d. Red bearing screws missing.
- e. RL-39 is crushed or mutilated.
- f. Axle bent or broken.
- g. Cotter pin missing or cotter pinhole broken off.

Distribution authorized to the Department of Defense and DOD contractors only for official use or for administration or operational purposes. The determination was made on 1 October 1987. Other requests for this document will be referred to Commander. US Army Communications-Electronics Command and Fort Monmouth. ATTN: AMSEL-ME-P. Fort Monmouth. NJ 07703-5000.

DESTRUCTION NOTICE—Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

By Order of the Secretary of the Army:

CARL E. VUONO General, United States Army Chief of Staff

Official:

R.L. DILWORTH

Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-51 Operator, Unit, and DS/GS requirements for CE-11.

Change No. 2

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 30 September 1976

# Operator's, Organizational, Direct Support, General Support, and Depot Maintenance Manual REEL EQUIPMENT CE-11 (NSN 5805-00-407-7722)

TM 11-3895-203-15, 11 April 1967, is changed as follows:

The title of this manual is changed as shown above.

Page 3. Paragraph 1-3 is superseded as follows:

### 1-3. Forms and Records

- a. Reports of Maintenance and Unsatisfactory Equipment. Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.
- b. Report of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A, and DSAR 4145.8.
- c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33A/AFR 75-18/MCO P4610.19B, and DSAR 4500.15.

Paragraphs 1-3.2 and 1-3.3 are added after paragraph 1-3.1.

## 1-3.2. Administrative Storage

For procedures, forms and records, and inspections required during administrative storage of this equipment, refer to TM 740-90-1.

# 1-3.3. Destruction of Army Electronics Materiel

Demolition and destruction of electronic equipment will be under the direction of the commander and in accordance with TM 750-244-2.

Page 9. Paragraph 3-2a and b are superseded as follows:

- a Trichloroethane.
- b. Cleaning Cloth (NSN 8305-00-267-3015).

#### WARNING

The fumes of trichloroethane are toxic. Provide thorough ventilation whenever used. DO NOT USE NEAR AN OPEN FLAME. Trichloroethane is not flammable, but exposure of the fumes to an open flame or hot metal forms highly toxic phosgene gas.

Paragraph 3-5, sequence No. 1. Add "fig. 1-1" to the Reference column.

Page 10. Paragraph 3-5, sequence No. 2, Procedure column. Delete "FSN 7930-395-9542" and the Warning notice. Add the following:

#### WARNING

The fumes of trichloroethane are toxic. Provide thorough ventilation whenever used. DO NOT USE NEAR AN OPEN FLAME. Trichloroethane is not flammable, but exposure of the fumes to an open flame or hot metal forms highly toxic phosgene gas.

Paragraph 3-6a. The warning notice is superseded as follows:

#### WARNING

The fumes of trichloroethane are toxic. Provide thorough ventilation whenever used. DO NOT USE NEAR AN OPEN FLAME. Trichloroethane is not flammable, but exposure of the fumes to an open flame or hot metal forms highly toxic phosgene gas.

Paragraph 3-6c. Delete "000 (FSN 5350-271-7939."

Paragraph 3-7. In lines 5 and 6, "(FSN 9150-273-2389)" is changed to read "(NSN 9150-00-273-2389)."

Page 11. Paragraph 4-2b and c are superseded as follows:

#### TM 11-3895-203-15, C 2

b. Materials.

(1) Trichloroethane.

(2) Cleaning cloth.

c. Test Equipment. Multimeter AN/URM-105 is required.

Paragraph 4-4, sequence No. 1. Add "Fig. 1-1" to the Reference column.

Sequence No. 6, Procedures and Reference columns. Change "310-4" to read "310-7."

Delete sequence No. 7 in its entirety.

Page 12. Paragraph 4-5. Change the second sentence to read "Use fine sandpaper and trichloroethane to clean the surface down to the bare

metal."

In the last sentence, change "TM 9-213 and TB SIG 364" to read "TM 43-0139 and TB 43-0118."

Page 13. Paragraph 5-2b. Add "Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools): Reel Equipment CE-11 (NSN 5805-00-407-7722), TM 11-3895-203-24P to the list of technical Publications.

Subparagraph c, last sentence. Change "310-4" to read "310-7."

Page 15. Appendix A is superseded as follows:

# APPENDIX A REFERENCES

Following is a list of applicable references available to the operator, organizational, direct support, general support, and depot repairmen of Reel Equipment CE-11.

support, and depot rep	pairmen of Reel Equipment CE-11.	
DA Pam 310-4	Index of Technical Manuals, Technical Bulletins, Supply Manuals (types 7, 8, and	
	9), Supply Bulletins, and Lubrication Orders.	
DA Pam 310-7	Pam 310-7 US Army Equipment Index of Modification Work Orders.	
TB SIG 355-1	Depot Inspection Standard for Repaired Signal Equipment.	
TB SIG 355-2	Depot Inspection Standard for Refinishing Repaired Signal Equipment.	
TB SIG 355-3	Depot Inspection Standard for Moisture and Fungus Resistant Treatment.	
TB 43-0118	Field Instructions for Painting and Preserving Electronics Command Equipment	
	Including Camouflage Pattern Painting of Electrical Equipment Shelters.	
TM 11-3895-203-24P	Organizational, Direct Support, and General Support Maintenance Repair Parts	
	and Special Tools Lists (Including Depot Maintenance Repair Parts and Special	
	Tools): Reel Equipment CE-11 (NSN 5805-00-407-7722).	
TM 11-5805-243-12	Operation and Organizational Maintenance: Telephone Set TA-1/PT.	
TM 11-5805-243-20P	Organizational Maintenance Repair Parts and Special Tool Lists: Telephone Set TA-1/PT.	
TM 11-5805-243-35	Field and Depot Maintenance: Telephone Set TA-1/PT.	
TM 11-5805-243-35P	Direct Support, General Support, and Depot Maintenance Repair Parts and Special Tools Lists: Telephone Set TA-1/PT.	
TM 11-6625-203-12	Operator and Organizational Maintenance: Multimeter AN/URM-105 and	
	AN/URM-105C Including Multimeter ME-77/U and ME-77C/U.	
TM 38-750	The Army Maintenance Management System (TAMMS).	
TM 43-0139	Painting Instructions for Field Use.	
TM 740-90-1	Administrative Storage of Equipment.	
TM 750-244-2	Procedures for Destruction of Electronics Materiel to Prevent Enemy Use (Electronics Command).	

Page 19. Appendix C, Maintenance Allocation is superseded as follows:

# APPENDIX C MAINTENANCE ALLOCATION

## Section I. INTRODUCTION

### C-1. General

This appendix provides a summary of the maintenance operations for the CE-11. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

## C-2. Maintenance Function

Maintenance functions will be limited to and defined as follows:

a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination.

b. Test. To verify serviceability and to detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition; i.e., to clean, preserve, drain, paint, or to replenish fuel/lubricants/hydraulic fluids or compressed air supplies.

d. Adjust Maintain within prescribed limits by bringing into proper or exact position, or by setting the operating characteristics to the specified parameters.

e. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipment used in precision measurement. Consists of the comparison of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

g. Install. The act of emplacing, seating, or fixing into position an item, part, module (component or assembly) in a manner to allow the proper functioning of the equipment/system.

h. Replace. The act of substituting a serviceable like-type part, subassembly, model (component or

assembly) for an unserviceable counterpart.

i Repair. The application of maintenance services (inspect, test, service, adjust, align, calibrate, replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module/component/assembly, end item or system. This function does not include the trial and error replacement of running spare type items such as fuses, lamps, or electron tubes.

j. Overhaul. That periodic maintenance effort (service/action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (e.g., DMWR) in appropriate technical publications Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like-new condition.

k. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like-new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours, miles, etc.) considered in classifying Army equipment components.

## C-3. Column Entries

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2, Component/Assembly. Column 2 contains the noun names of components, subassemblies, assemblies, and modules for which maintenance is authorized.

c. Column 3, Maintenance Functions. Column 3 lists the functions to be performed on the item listed in column 2. When items are listed without maintenance functions, it is solely for the purpose of having the group numbers in the MAC and RPSTL coincide.

d. Column 4, Maintenance Category. Column 4 specifies, by the listing of a "worktime" figure in

#### TM 11-3895-203-15, C 2

the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance categories, appropriate "worktime" figures will be shown for each category. The number of taskhours specified by the "worktime" figure represents the average time required to restore an item (assembly, subassembly, component, module, end item or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time and quality assurance/quality control time in an addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. If the intermediate facility (L) is not available, this category of maintenance will be accomplished at depot. If an intermediate facility (L) has been designated, the maintenance information required to perform this category of maintenance will be provided in the DMWR. Subcolumns of column 4 are as follows:

C-Operator/crew

O-Organizational

F—Direct support
H—General support

D-Depot

e. Column 5, Tools and Equipment. Column 5 specifies by code, those common tool sets (not individual tools) and special tools, test, and support equipment required to perform the designated function.

# C-4. Tool and Test Equipment Requirements (Table 1)

- a. Tool or Test Equipment Reference Codes. The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tool or test equipment for the maintenance functions.
- b. Maintenance Category. The codes in this column indicate the maintenance category allocated the tool or test equipment.
- c. Nomenclature. This column lists the noun name and nomenclature of the tools and test equipment required to perform the maintenance functions.
- d. National/NATO Stock Number. This column lists the National/NATO stock number of the specific tool or test equipment.
- e. Tool Number. This column lists the manufacturer's part number of the tool followed by the Federal Supply Code for Manufacturers (5-digit) in parentheses.

(Next printed page is 5)

## SECTION II MAINTENANCE ALLOCATION CHART FOR

(1)   COMPONENT ASSEMBLY   MAINTENANCE CATEGORY   C   O   F   H   D      OO   REEL EQUIPMENT CE-11   Inspect Service Inspect Test Adjust Replace Test Adjust Rebuild Rebuild Rebuild Rebuild Replace Test O.5   O.	(5) TOOLS AND		nev.	TEGO	(4)			EEL EQUIPMENT CE-11 (3)	(2)	
REEL EQUIFMENT CE-11   Service   1.3   0.2   1.5   1.0   0.5   1.0   0.5   1.0   0.5   1.0   0.5   1.0   0.5   1.0   0.5   0.5   1.0   0.5   1.0   0.5   1.0   0.5   1.0   0.5   1.0   0.5   0.5   1.0   0.5   0	EQUIPMENT		I					FUNCTION	COMPONENT ASSEMBLY	GROUP
01 CRANK, REEL  02 HANDLE ASSEMBLY  03 REEL RL-39, RL-39A, RL-39B  04 STRAP ST-34  05 STRAP ST-35  06 TELEPHONE SET TA-1/PT	1 1 1,2 1,2 1,2 1,2 1,2	3.0	,	2.0	0.5	0.2	0.2	Service Inspect Test Replace Test Adjust Pepair Overhaul	REEL EQUIPMENT CE-11	00
02 HANDLE ASSEMBLY 03 REEL RL-39, RL-39B Replace 0.5 04 STRAP ST-34 Replace 0.5 05 STRAP ST-35 06 TELEPHONE SET TA-1/PT										01
03 REEL RL-39, RL-39B  04 STRAP ST-34  05 STRAP ST-35  06 TELEPHONE SET TA-1/PT			-							02
04 STRAP ST-34 05 STRAP ST-35 06 TELEPHONE SET TA-1/PT			1						[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]	03
05 STRAP ST-35 06 TELEPHONE SET TA-1/PT			1						STRAP ST-34	04
06 TELEPHONE SET TA-1/PT (SEE TM 11-5805-243-12)						0.5		Replace	STRAP ST-35	05
									TELEPHONE SET TA-1/PT (SEE TM 11-5805-243-12)	06

## TABLE I. TOOL AND TEST EQUIPMENT REQUIREMENTS FOR

REEL EQUIPMENT CE-11

EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL NATO STOCK NUMBER	TOOL NUMBER
1	0	MULTIMETER AN/URM-105	6625-00-581-2036	
2	F,H,D	TOOL EQUIPMENT TE-H9	5180-00-408-1863	
				,
				1
			36	
			X 22	
				- 1
				-

Page 22, Appendix D, Organizational, DS, GS, and Depot Repair Parts is rescinded. By Order of the Secretary of the Army:

> FRED C. WEYAND General, United States Army Chief of Staff

# Official: PAUL T. SMITH Major General, United States Army The Adjutant General

5-27

5-35

Distribution:	
Active Army:	5-37
USASA (2)	5-127
COE (1)	5-137
TSG (1) USAARENBD (1)	5-145
	5-155
DARCOM (1)	5-157
MICOM (2) TECOM (2)	7
TRADOC (2)	7-15
USACC (4)	7-18
OS Maj Comd (4)	7-35
LOGCOMD (3)	7-36
MDW (1)	7-37
Armies (2)	7-42
	7-45
Corps (2)	7-55
Inst (2) except	7-57
Ft Gillem (10)	7-58
Ft Gordon (10) Ft Huachuca (10)	7-100
	7-102
Ft Carson (5) SAAD (30)	7-167
	7-168
LBAD (14)	8-510
TOAD (14) SHAD (3)	11-97
HISA (Ft Monmouth) (33)	11-98
Ft Richardson (ECOM Ofc) (2)	11-117
Svc Colleges (1)	11-127
USASESS (5)	11-500(AA-AC)
USAICS (3)	17
USAADS (2)	17-15
USAFAS (2)	17-16
USAARMS (2)	17-35
USAIS (2)	17-42
USAES (2)	17-51
MAAG (1)	17-52
USARMIS (1)	17-55
USAERDAA (1)	17-56
USAERDAW (1)	17-57
Sig FLDMS (1)	17-58
Units org under fol TOE (1 ea.):	17-75
1.55	17-76
1-56	17-77
5-25	17-78
5-26	17-95
z 02	17-98

17-98

17-100

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17-106	87
17-127	87-100
29-75	39-51
	44-85
29-76	44-87
29-105	55-47
29-106	57
30-25	57-100
30-29	31-100
32-56	

ARNG: State AG (3); units—same as active Army except allowance is one (1) copy each. USAR: None.

For explanation of abbreviations used, see AR 310-50.

CHANGE No. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 7 October 1975

# Operator's, Organizational, Direct Support, General Support, and Depot Maintenance Manual Including Repair Parts and Special Tools List REEL EQUIPMENT CE-11

TM 11-3895-203-15, 11 April 1967, is changed as follows:

The title of this manual is changed as shown above.

Page 3, paragraph 1-2. Delete paragraph 1-2 and substitute:

## 1-2. Indexes of Publications

a. DA Pam 310-4. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. DA Pam 310-7. Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

Paragraph 1-3. Delete paragraph 1-3 and substitute:

#### 1-3. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and

prescribed by TM 38-750 (Army).

b. Report of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58 and DSAR 4145.8.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38 and DSAR 4500.15.

## 1-3.1 Reporting of Errors

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 Blank Forms) and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-Q, Fort Monmouth, NJ 07703.

Page 4, paragraph 1-5. After paragraph 1-5 add:

## 1-6. Items Comprising an Operable Equipment

			Fig.
NSN	QTY	Nomenclature, part No., and mfr code	No.
		NOTE	
		The part number is followed by the applicable 5-digit Fed-	
		eral supply code for manufacturers (FSCM) identified in	
		SB 708-42 and used to identify manufacturer, distributor,	
		or Government agency, etc.	
5805-00-407-7722		Reel Equipment CE-11: SC-A 4709; 80063	1-1
0000 00 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Consisting of:	
3895-00-127-0999	1	Crank Reel: SM-C-333569; 80063	1-2
3895-00-498-8343	1	Reel RL-39A; RL-39B: SC-DL-333554; 80063	1-1
3550-10-130-00-13	i	Telephone Set TA-1/PT: SC-DL-168899; 80063	1-1

Page 6, paragraph 2-2, subparagraph b. Delete the second sentence of paragraph 2-2b.

Page 9, paragraph 3-5, sequence No. 1. Delete "App B" from the References column.

Page 11, paragraph 4-4, Sequence Nc.'s 1 and 7. Delete "App B" from the References column.

Page 16, appendix B. Delete appendix B and substitute:

# APPENDIX B BASIC ISSUE ITEMS LIST (BIIL) AND ITEMS TROOP INSTALLED OR AUTHORIZED LIST (ITIAL)

## Section I. INTRODUCTION

### B-1. Scope

This appendix lists only basic issue items required by the crew/operator for installation, operation, and maintenance of the Reel Equipment CE-11.

#### **B-2.** General

This Basic Issue Items and Items Troop Installed or Authorized List is divided into the following sections:

- a. Basic Issue Items List Section II. A list, in alphabetical sequence, of items which are furnished with, and which must be turned in with the end item.
- b. Items Troop Installed or Authorized List Section III. Not applicable.

## B-3. Explanation of Columns

The following provides an explanation of columns found in the tabular listings:

- ${\it a. Illustration.} \ This column is divided as follows:$ 
  - (1) Figure Number. Indicates the figure

number of the illustration in which the item is

- (2) Item Number. Not applicable.
- b. National Stock Number. Indicates the National 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.
- (1) 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.
- (2) Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., and is identified in SB 708-42.
- d. Quantity Furnished With Equipment (Basic Issue Items Only). Indicates the quantity of the basic issue item furnished with the equipment.

#### Section II. BASIC ISSUE ITEMS LIST

	(1) stration	(2) National	(3) Description		Qty
(A) Fig. Na	(B) Item Na	stock number	Part number & FSCM	Usable on code	with
1-1		8465-00-498-7991	STRAP ST-34: SM-D-333575 (80063)		1
1-1		8465-00-498-7992	STRAP ST-35: SM-D-333375 (88063)		1

## By Order of the Secretary of the Army:

FRED C. WEYAND General, United States Army Chief of Staff

#### Official:

PAUL T. SMITH
Major General, United States Army
The Adjutant General

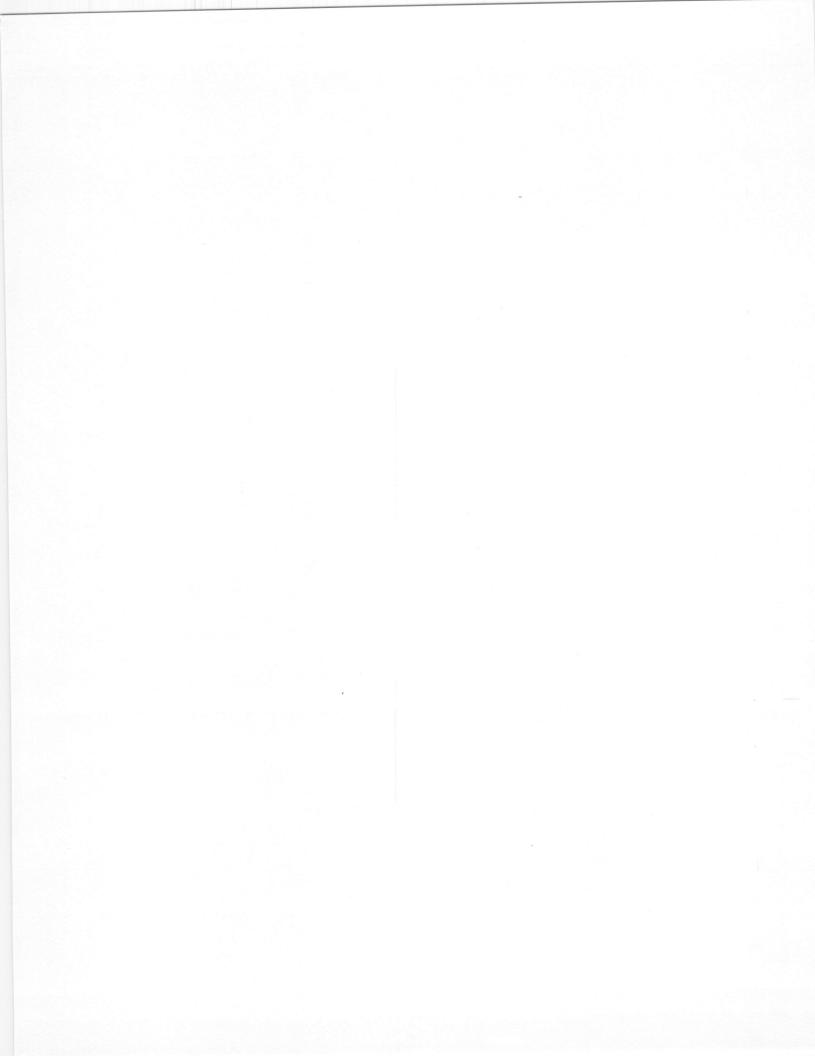
#### Distribution:

stribution:		
Active Army:		11-117
USASA (2)	Sig Sec USA Dep (2)	11-127
Dir of Trans (1)	Sig Dep (2)	11-500(AA-AC)
COE (1)	Sig FLDMS (1)	17
TSG (1)	USAERDAA (1)	17-15
USAARENBD (1)	USAERDAW (1)	17-16
AMC (1)	MAAG (1)	17-35
TRADOC (2)	USARMIS (1)	17-42
ARADCOM (2)	Units org under fol TOE	17-51
ARADCOM Rgn (2)	(1 copy each unit):	17-52
OS Maj Comd (4)	1-55	17-55
LOGCOMDS (3)	1-56	17-56
MICOM (2)	5-25	17-57
TECOM (2)	5-26	
USACC (4)	5-27	17-58
MDW (1)	5-35	17-75
Armies (2)	5-37	17-76
Corps (2)	5-127	17-77
HISA (FT Monmouth) (43)	5-137	17-78
Svc Colleges (1)	5-145	17-95
USASESS (5)	5-155	17-98
USAADS (2)	5-157	17-100
USAFAS (2)	7	17-105
USAARMS (2)	7-15	17-127
USAIS (2)	7-18	29-75
USAES (2)	7-35	29-76
USAINTCS (3)	7-36	29-105
WRAMC (1)	7-37	29-106
ATS (1)	7-42	30-25
Fort Gillem (10)	7.45	30-29
Fort Gordon (10)	7-55	32-56
WSMR (1)	7-57	37
Fort Carson (5)	7-58	37-100
Ft Richardson (ECOM Ofc) (2)	7-100	39-51
Army Dep (1) except	7-102	44-85
LBAD (14)	7-168	44-87
SAAD (30)	7-167	55-47
TOAD (14)	8-510	57
SHAD (3)	11-97	57-100
USA Dep (2)	11-98	

NG: State AG (3); units — same as active Army except allowance is one copy each unit.

USAR: None.

For explanation of abbreviations used, see AR 310-50.



TECHNICAL MANUAL No. 11-3895-203-15

HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON, D.C., 11 April 1967

# ORGANIZATIONAL, DS, GS, AND DEPOT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) REEL EQUIPMENT CE-11

Chapter   1. Introduction   1-1   3     3   3   5   5   5   5   5   6   5   6   5   6   6				Paragraph	Page
Section I. General   1-1   3	CHAPTER	1.	INTRODUCTION		
Scope			G1	1-1	3
Forms and records	200		0	1-2	3
II. Description and data			T 1 C Llications	1-3	3
Purpose and use			Forms and records		
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This manual supersedes TB SIG 314, 7 October 1957; TM 11-3895-203-12P, 15 July 1959; and TM 11-3895-203-35P, 15 July 1959; and replaces REP 52, 15 March 1945.

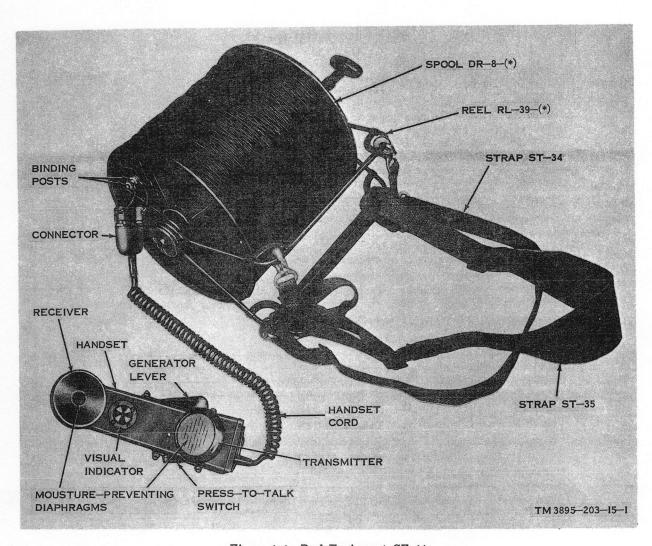


Figure 1-1. Reel Equipment CE-11.

#### CHAPTER 1

## INTRODUCTION

### Section I. GENERAL

#### 1-1. Scope

a. This manual describes Reel Equipment CE-11 and covers its operation, and organizational, direct and general support, and depot maintenance. It includes cleaning and inspection of the equipment, and the replacement of parts available to organizational, DS, GS, and depot maintenance personnel.

b. Official nomenclature followed by (\*) is used to indicate all models of the equipment item covered in this technical manual. Thus, Reel RL-39-(\*) represents Reel RL-39-A and RL-39-B, and Spool DR-8-(\*) represents Spool DR-8-A and DR-8-B.

#### 1-2. Index of Publications

Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to this equipment. DA Pam 310-4 is an index of current technical manuals, technical bulletins, supply manuals (types 7, 8, and 9), supply bulletins, lubrication orders, and modification work orders available through publica-

tions supply channels. The index lists the individual parts (-10, -20, -35P, etc) and the latest changes to and revisions of each equipment publication.

## 1-3. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Use equipment forms and records in accordance with instructions in TM 38-750.

b. Report of Damaged or Improper Shipment. Fill out and forward DD Form 6 (Report of Damaged or Improper Shipment) as prescribed in AR 700-58 (Army), NAVSANDA Publication 378 (Navy), and AFR 71-4 (Air Force).

c. Reporting of Equipment Manual Improvements. Report of errors, omissions, and recommendations for improving this manual by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to DA Publications) and forwarded direct to Commanding General, U.S. Army Electronics Command, ATTN: AMSEL-MR-NMP-AD, Fort Monmouth, N.J. 07703.

#### Section II. DESCRIPTION AND DATA

## 1-4. Purpose and Use

Reel Equipment CE-11 is used for laying and recovering field wire. The operator can establish communication with the starting location by connecting Telephone Set TA-1/PT to the terminal board on Spool DR-8-(\*), using a short piece of paired field wire (4 to 6 inches) to make these connections. Each spool

is supplied with approximately  $\frac{1}{4}$  mile of field wire. The range of Telephone set TA-1/PT is 3 to 5 miles.

# 1-5. Description of Reel Equipment CE-11 (figs. 1-1 and 1-2)

Reel Equipment CE-11 is a lightweight portable unit designed to be carried by one man.

It consists of the following components:

a. Reel RL-39-(\*). The reel consists of a lightweight, U-shaped metal framework equipped with reel bearings, and a handle used to crank Spool DR-8-(\*) when recovering wire.

b. Straps ST-34 and ST-35. These straps are used to secure the CE-11 in front of the man who is laying or recovering telephone wire.

c. Telephone Set TA-1/PT. The TA-1/PT is a lightweight, portable, sound-powered telephone set used for communication between the starting point and the wire laying/recovering operation.

Note. Spool DR-8-(\*) is used with, but is not a part of, Reel RL-39-(\*). When requisitioning field wire for use with Reel Equipment CE-11, specify that it be wound on Spool DR-8-(\*).

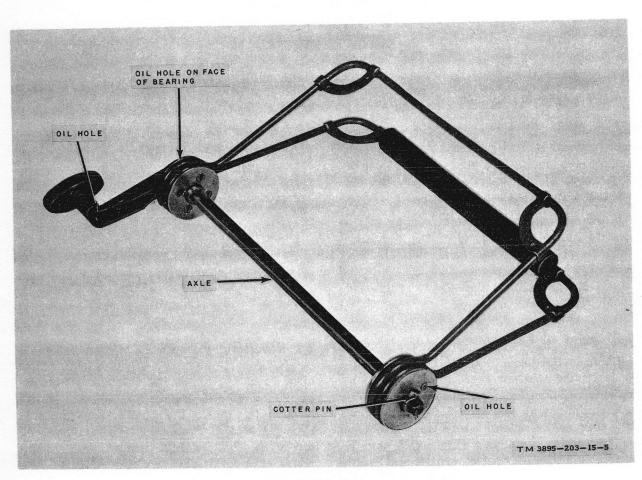


Figure 1-2. Reel RL-39-(\*), lubrication points.

#### CHAPTER 2

## INSTALLATION AND OPERATING INSTRUCTIONS

## Section I. SERVICE UPON RECEIPT OF REEL EQUIPMENT CE-11

## 2-1. Unpacking

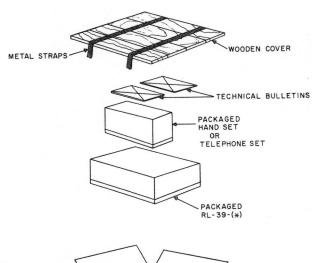
(fig. 2-1)

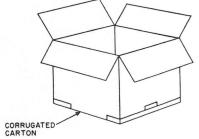
a. Packaging Data. When packed for shipment, the components of the CE-11 are wrapped in paper and erclosed in an inner corrugated carton. The carton is placed in a moisture-vaporproof barrier with a desiccant and humidity indicator, which is placed in an outer corrugated carton. The outer carton is placed in a moisture-vaporproof barrier, which in turn is placed in a wooden packing case. Metal straps are applied around the outside of the wooden packing case.

- b. Removing Contents. Follow the procedures outlined below when unpacking the equipment.
  - (1) Cut the metal straps with a suitable cutting device or twist them with pliers until they break.
  - (2) Remove the nails from the wooden cover of the wooden packing case with a nailpuller or pry bar.

Caution: Do not pry deeply into the interior of the case with a pry bar; this may damage the equipment.

- (3) Remove the wooden cover of the case and open the moisture-vaporproof barrier that covers the outer corrugated carton inside the case.
- (4) Remove the outer corrugated carton from inside the moisture-vaporproof barrier.
- (5) Open the outer corrugated carton and open the moisture-vaporproof barrier.
- (6) Open the inner corrugated carton and remove the contents.





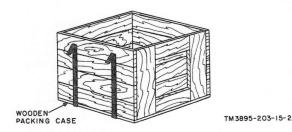


Figure 2-1. Reel Equipment CE-11, packing diagram.

(7) Unwrap the components and place them on a clean, dry surface.

## 2-2. Checking Unpacked Equipment

a. Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, refer to paragraph 1–3 for applicable forms and records.

b. Check the equipment against the packing list. If a packing list is not available, use the basic issue items list (app B).

# Section II. INSTALLATION AND OPERATION OF REEL EQUIPMENT CE-11

#### 2-3. Installation

(figs. 1-1 and 1-2)

Tool Equipment TE-49 is required for installation. Install Spool DR-8-(\*) on Reel RL-39-(\*) as follows:

- a. Remove the cotter pin (fig. 1-2) from the reel axle and remove the axle from the reel bearings.
- b. Guide the reel axle through the spool and the reel bearings.
  - c. Replace the cotter pin.

## **2–4.** Laying Field Wire (fig. 2–2)

- a. Terminate the wire at the starting location by connecting the free (outside) end to a field telephone, a local battery switchboard, or a sound-powered Telephone Set TA-1/PT.
- b. Attach Telephone Set TA-1/PT to your belt, using the belt clip provided.
- c. Lay the wire with Reel RL-39-(\*) by holding the two U-shaped handles in one hand while walking away from the starting location and permitting the wire to unwind from Spool DR-8-(\*).
- d. To communicate with the starting location, stop walking, and use the following procedure:

- (1) Connect the handset of the TA-1/PT to the terminal board on the side of Spool DR-8-(\*). Use a 4- to 6-inch length of paired field wire to make this connection.
- (2) Signal the operator at the starting location by whistling or speaking into the handset mouthpiece, or by rapidly pressing the TA-1/PT generator level, and releasing.

## 2-5. Recovering Field Wire

(figs. 1-1 and 2-3)

- a. Attach Straps ST-34 and ST-35.
- b. Fasten the ends of Strap ST-35 to the upper U-shaped reel handle (fig. 1-1), and place the loop of the strap over your head. Slide the strap down and adjust its position so that the weight of the reel and spool of wire is distributed across your shoulders and back.
- c. Place Strap ST-34 around your waist and fasten the ends of the strap to the lower U-shaped handle (fig. 1-1) to prevent a swinging action when you are walking.
- d. Adjust both straps for the most comfortable position of the CE-11.
- e. Recover the wire with Reel RL-39-(\*) by walking toward the wire which is to be recovered, while turning the reel handcrank to wind the wire on Spool DR-8-(\*).



Figure 2-2. Laying wire.

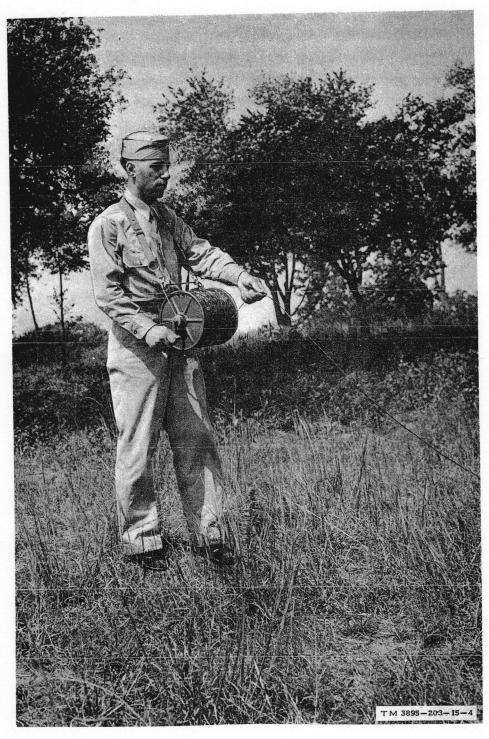


Figure 2-3. Recovering wire.

#### **CHAPTER 3**

## **OPERATOR'S MAINTENANCE INSTRUCTIONS**

## 3-1. Scope of Operator's Maintenance

The maintenance duties assigned to the operator of the CE-11 are listed below, with a reference to the paragraphs covering the specific maintenance function.

- a. Operator's daily preventive maintenance checks and services (para 3-5).
  - b. Cleaning (para 3-6).

## 3-2. Items Required for Maintenance

Only the following items are required for maintenance:

- a. Cleaning Compound (FSN 7930-395-9542).
  - b. Cleaning cloth (FSN 8305-267-3015).

Warning: Prolonged breathing of cleaning compound is dangerous; provide adequate ventilation. Cleaning compound is flammable; do not use near a flame. Avoid contact with the skin; wash off any that spills on your hands.

#### 3-3. Preventive Maintenance

Preventive maintenance is the systematic care, servicing, and inspection of equipment to prevent the occurrence of trouble, to reduce downtime, and to assure that the equipment is serviceable.

- a. Systematic Care. The procedures given in paragraphs 3-5 and 3-6 cover routine systematic care and cleaning essential to proper upkeep and operation of the equipment.
- b. Preventive Maintenance Checks and Services. The preventive maintenance checks and services chart (para 3-5) outlines functions to be performed at specific intervals. These checks and services are to maintain Army electronic equipment in a combat serviceable condition; that is, in good general (physical) condition and in good operating condition. To assist operators in maintaining combat serviceability, the chart indicates what to check and the normal conditions: the References column lists the illustration, paragraph, or appendix that contains detailed repair or replacement procedures. If the defect cannot be remedied by the operator, higher category maintenance or repair is required. Records and reports of these checks and services must be made in accordance with the requirements set forth in TM 38-750.

## 3-4. Preventive Maintenance Checks and Services Periods

Paragraph 3-5 specifies checks and services that must be accomplished weekly.

## 3-5. Operator's Weekly Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be inspected	Procedure	References
1 2		Check to see that the equipment is complete. Check all components for dust, dirt, rust, corrosion, grease, and fungus. Use a clean, dry, lint-free cloth or brush to remove dust, fungus, and dirt. If neces-	App B.

Sequence No.	Item to be inspected	Procedure	References
3 4	StrapsOperation	sary, moisten the cloth or brush with cleaning compound (FSN 7930-395-9542). After cleaning, wipe dry with a cloth. Use fine sandpaper to remove rust and corrosion.  Warning: Cleaning compound is flammable and its fumes are toxic. Provide adequate ventilation; do not use near a flame. Wash off any that spills on your hands.  Caution: When cleaning the earphone or microphone cap, do not insert sharp tools into the holes.  Check to see that Straps ST-34 and ST-35 are not cut or damaged.  Check the operation of Telephone Set TA-1/PT in accordance with the procedure outlined in chapter 3 of TM 11-5805-243-12.	Fig. 1-1. TM 11-5805-243-12.

### 3-6. Cleaning

Inspect the exterior surfaces of Reel Equipment CE-11. The exterior surfaces should be free of dust, dirt, grease, and fungus.

a. Remove dust and dirt with a soft, clean cloth.

Warning: Prolonged breathing of cleaning compound is dangerous; make sure adequate ventilation is provided. Cleaning compound is flammable; do not use near a flame. Avoid contact with the skin; wash off any that spills on your hands.

b. Remove grease, fungus, and ground-in

dirt from the equipment; use a cloth dampened (not wet) with cleaning compound.

c. Remove rust and corrosion with fine sand-paper #000 (FSN 5350-271-7939).

## 3-7. Lubrication

The reel bearings and the crank handle should be lubricated during the quarterly preventive maintenance checks and services. Apply 1 or 2 drops of Lubricating Oil, General Purpose, Preservative (PL Special) (FSN 9150-273-2389), to the oilhole in each reel bearing and to the oilhole in the reel crank handle.

#### **CHAPTER 4**

## ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

## 4-1. Scope of Organizational Maintenance

- a. This chapter contains instructions covering organizational maintenance of the CE-11.
- b. Organizational maintenance consists of the following:
  - (1) Preventive maintenance (paras 4-3 and 4-4).
  - (2) Touchup painting (para 4-5).
  - (3) Troubleshooting (para 4-5).

## 4—2. Tools, Materials, and Test Equipment Required

The tools, materials, and test equipment required for organizational maintenance are as follows:

- a. Tools. Tool Equipment TE-49.
- b. Materials.

- (1) Cleaning Compound (FSN 7930-395-9542).
- (2) Cleaning cloth.
- c. Test Equipment. Multimeter TS-352/U is required.

### 4-3. Quarterly Maintenance

Quarterly preventive maintenance checks and services on the CE-11 are required. Periodic weekly checks and services constitute a part of the quarterly preventive maintenance checks and services and must be performed concurrently. All deficiencies or shortcomings will be recorded in accordance with the requirements of TM 38-750. Perform all the checks and services listed in the organizational quarterly preventive maintenance checks and services chart (para 4-4) in the sequence listed.

## 4-4. Organizational Quarterly Preventive Maintenance Checks and Services Chart

Sequence No.	Item	Procedure	References
1	Completeness	See that the equipment is complete	App B.
2	Cleanliness	See that the equipment is clean	Para 3-6.
3	Preservation		Paras 3-6 and 4-5.
4	Lubrication	Lubricate the equipment as outlined in paragraph 3-7.	Para 3-7.
5	Publications	See that all publications are complete, serviceable, and current.	DA Pam 310-4.
6	Modifications	Check DA Pam 310-4 to determine if new applicable MWO's have been published. All URGENT MWO's must be applied immediately. ALL NORMAL MWO's must be scheduled.	DA Pam 310-4 and TM 38-750.
7	Spare parts	Check all spare parts (organizational) for general condition and proper storage.  There should be no evidence of overstock, and all shortages must be on valid requisitions.	Арр В.

## 4-5. Touchup Painting

When the finish on the metal parts of the equipment has been badly scarred or damaged, lightly sand them with fine sandpaper. Use #000 sandpaper (FSN 5350-271-7939), and cleaning compound (FSN 7930-395-9542) to clean the surface down to the bare metal. Brush two thin coats of paint on the bare metal. Refer to the applicable cleaning and refinishing practices specified in TM 9-213 and TB SIG 364.

## 4-6. Troubleshooting

The electrical troubles that occur in the CE-11 are open circuits, short circuits, and poor connections in Telephone Set TA-1/PT. Refer to TM 11-5805-243-12 for the equipment performance checklist. If the corrective measures indicated do not repair the equipment, trouble-shooting and repair is required by higher category maintenance.

#### CHAPTER 5

## **DEPOT OVERHAUL STANDARDS**

## 5–1. Applicability of Depot Overhaul Standards

The tests outlined in this chapter are designed to measure the performance capability of a repaired equipment. Equipment that meets the minimum standards stated in the tests will furnish satisfactory operation, equivalent to that of new equipment.

## 5-2. Applicable References

a. Repair Standards. Applicable procedures of the depot performing these tests and the general standards for repaired electronic equipment given in TB SIG 355-1, TB SIG 355-2, and TB SIG 355-3 form a part of the requirements for testing this equipment.

b. Technical Publications. The following technical publications are applicable to this equipment:

Title	Number
Organizational Maintenance Repair Parts and Special Tools Lists: Telephone Set TA-1/PT.	TM 11-5805-243-20P
DS, GS, and Depot Mainte- nance Repair Parts and Special Tools Lists: Tele-	TM 11-5805-243-35P

phone Set TA-1/PT.

Operation and Organizational TM 11-5805-243-12

Maintenance Telephone Set TA-1/PT.

Field and Depot Maintenance TM 11-5805-243-35 Telephone Set TA-1/PT.

c. Modification Work Orders. Perform all applicable Modification Work Orders pertaining to this equipment before making the tests specified. DA Pam 310-4 lists all available MWO's.

## 5-3. Test Facilities Required

Spool DR-8-(\*) is the only equipment required to provide satisfactory inspection, meeting the requirements of this standard for Reel RL-39-(\*). Telephone Set TA-1/PT must meet the requirements given in TM 11-5805-243-35.

## 5-4. Tests on Reel RL-39-(\*)

- a. Visual and Mechanical Requirements.
  - Reels RL-39-(\*) should be complete with respect to parts peculiar to their design.
  - (2) Reel components should be free of grease, dirt, corrosion (rust or salt formations), and other foreign matter. Welds should be free of flux and oxidation products.
  - (3) Component parts should be securely mounted. Screws should be firmly seated, tight, and free from sharp edges, slivers, and burrs. Slight burrs on screws are permissible provided they have no sharp edges. Threaded parts should not be stripped or crossed.
  - (4) The cotter pin should be present and in good condition.
  - (5) Repaired equipment should be reasonably presentable from an appearance standpoint. Parts should not be crushed, cracked, or mutilated. Minor damage, such as slight scratches and dents, is permissible.
  - (6) There should be no bare spots, peeling, or flaking of finish. Touching up of finish is acceptable.

- (7) The replacement parts and material should conform to the requirements in current specifications.
- (8) The reel frame should be in good condition and not distorted.
- (9) The reel bearings should be in good condition and allow the axle to turn freely.
- (10) The axle should be in good condition, not bent, and rotate freely in the reel bearings.
- (11) The crank should be in good condition, and the handle should rotate freely.
- (12) Straps ST-34 and ST-35 should be new or in good condition. The snaphooks should close securely.

- (13) The reel equipments should have been lubricated before inspection in accordance with the lubrication instructions given in paragraph 3-7.
- (14) Applicable moistureproofing and fungiproofing instructions should have been complied with.

### b. Test Requirement.

- (1) The reel mechanism should be tested, using Spool DR-8-(\*) fully loaded with approximately one-quarter mile of field wire, to simulate paying out wire.
- (2) The mechanism should operate smoothly, and without jamming.

## APPENDIX A

## **REFERENCES**

Following is a list of references available to the operator, organizational, DS, GS, and depot repairmen of Reel Equipment CE-11.

DA Pam 310-4	Index of Technical Manuals, Technical Bulletins, Supply Manuals (types 7, 8, and 9), Supply Bulletins, Lubrication Orders, and Modification
	Work Orders.
TB SIG 355-1	Depot Inspection Standard for Repaired Signal Equipment.
TB SIG 355-2	Depot Inspection Standard for Refinishing Repaired Signal Equipment.
TB SIG 355-3	Depot Inspection Standard for Moisture and Fungus Resistant Treatment.
TB SIG 364	Field Instructions for Painting and Preserving Electronics Command
	Equipment.
TM 9-213	Painting Instructions for Field Use.
TM 11-5527	Multimeters TS-352/U, TS-352A/U, and TS-352B/U.
TM 11-5805-243-12	Operation and Organizational Maintenance: Telephone Set TA-1/PT.
TM 11-5805-243-20F	Organizational Maintenance Repair Parts and Special Tool Lists: Tele-
	phone Set TA-1/PT.
TM 11-5805-243-35	Field and Depot Maintenance: Telephone Set TA-1/PT.
TM 11-5805-243-35F	DS, GS, and Depot Maintenance Repair Parts and Special Tools List:
	Telephone Set TA-1/PT.
TM 38-750	Army Equipment Record Procedures.

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#### APPENDIX B

## BASIC ISSUE ITEMS LIST

## Section I. INTRODUCTION

#### B-1. General

This appendix lists items for Reel Equipment CE-11, the component items comprising it, and the items which accompany it, or are required for installation, operation, or operator's maintenance.

## **B-2.** Explanation of Columns

An explanation of the columns in section II is given below.

- a. Source, Maintenance, and Recoverability Codes Column 1.
  - (1) Source code, column 1a. The selection status and source for the listed item is noted here. The source code used is:

Code Explanation

- P—Applies to repair parts with are stocked in or supplied from the GSA/ DSA, or Army supply system, and authorized for use at indicated maintenance categories.
- A—Applies to assemblies that are not procured or stocked as such but are made up of two or more units, each of which carry individual stock numbers and descriptions and are procured and stocked and can be assembled by units at indicated maintenance categories.
- (2) Maintenance code, column 1b. The lowest category of maintenance authorized to install the listed item is noted here. The maintenance code used is as follows:

Code Explanation

C Operator/Crew

(3) Recoverability code, column 1c. The information in this column indicates whether unserviceable items should be returned for recovery or salvage. Recoverability code and it's explanation are as follows:

Note. When no code is indicated in the recoverability column, the part will be considered expendable.

Code Explanation

- R—Applies to repair parts and assemblies that are economically repairable at DSU and GSU activites and are normally furnished by supply on an exchange basis.
- b. Federal Stock Number, Column 2. The Federal stock number for the item is indicated in this column.
- c. Description, Column 3. The Federal item name, a five-digit manufacturer's code, and a part number are included in this column.
- d. Unit of Issue, Column 4. The unit used as a basis of issue (e.g., ea, pr, ft, yd, etc) is noted in this column.
- e. Quantity Incorporated in Unit Pack, Column 5. Not used.
- f. Quantity Incorporated in Unit, Column 6. The total quantity of the item used in the equipment is given in this column.
- g. Quantity Authorized, Column 7. The total quantity of an item required to be on hand and necessary for the operation and maintenance of the equipment is given in this column.
  - h. Illustration, Column 8.
    - (1) Figure number, column 8a. The num-

ber of the illustration in which the item is shown is indicated in this column.

(2) Item or symbol number, column 8b.
Not used.

## B-3. Federal Supply Codes

This paragraph lists the Federal supply code with the associated manufacturer's name.

Code. 80063

Army Electronics Command Procurement and Production Directorate.

## Section II. BASIC ISSUE ITEMS LIST

co e	101			8	BASIC	IC ISSUE ITEMS LIST	(4)	0 T	o Y	3	ILLUS	ILLUSTRATIONS
-	CODE	(2) FEDERAL STOCK				(3) DESCRIPTION	ISSUE	NC N E	N N N	AUTH	(3)	(B)
INIA		NUMBER	MO 1	MODEL 13 4 E		- C		PACK			NUMBER	SYMBOL NUMBER
$\rightarrow$	-		ų	-	_							
O	CC.	5805-407-7722				REEL EQUIPMENT CE-11: Portable reel equipment used to set up temporary telephone communication over $1/4$ mile or less of light fieldwire; $80063$ ; $SC-A-4709$ (This item is nonexpendable)	9				1-1	
Ü						TECHNICAL MANUAL TM 11-3895-203-15	a.		1	П.		
						Requisition through pinpoint account number if assigned; otherwise through nearest Adjutant General facility.						
						NOTE: A quantity of one technical manual is packed with each equipment. Where a valid need exists, additional copies may be requisitioned and kept on hand.						
Ü		3895-127-0999				CRANK, REEL: 80063; SM-C-333569	e e		-		1-2	
Ü	æ	3895-498-8343				REEL RL-39; RL-39A; RL-39B: 80063; SC-PL-333554	e		1		1-1	
U	K	5805-521-1320				TELEPHONE SET TA-1/PT: 80063; SC-DL-168899 (NX)	ea		ч		1-1	
O		8465-498-7991				STRAP ST-34: 80063; SM-D-333575	ea		Н	7	1-1	
U		8465-498-7992				STRAP ST-35: 80063; SM-D-333575	e		-	-1	1-1	
						NO ACCESSORIES, TOOLS, OR TEST EQUIPMENT ARE TO BE ISSUED WITH THIS EQUIPMENT						
						NO BASIC ISSUE ITEMS ARE MOUNTED IN OR ON THIS EQUIPMENT						

#### APPENDIX C

#### MAINTENANCE ALLOCATION

#### Section I. INTRODUCTION

#### C-1. General

This appendix provides a summary of the maintenance operations covered in the equipment literature for Reel Equipment CE-11. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

#### C-2. Explanation of Format for Maintenance Allocation Chart

- a. Group Number. Group numbers correspond to the reference designation prefix assigned in accordance with ASA Y32.16, Electrical and Electronics Reference Designations. They indicate the relation of listed items to the next higher assembly.
- b. Component Assembly Nomenclature. This column lists the item names of component units, assemblies, subassemblies, and modules on which maintenance is authorized.
- c. Maintenance Function. This column indicates the maintenance category at which performance of the specific maintenance function is authorized. Authorization to perform a function at any category also includes authorization to perform that function at higher categories. The codes used represent the various maintenance categories as follows:

Code	Maintenance Category
C	Operator/Crew
0	Organizational Maintenance
F	Direct Support Maintenance
н	General Support Maintenance
D	Depot Maintenance

- d. Tools and Equipment. The numbers appearing in this column refer to specific tools and equipment which are identified by these numbers in section III.
  - e. Remarks. Self explanatory.

# C-3. Explanation of Format for Tool and Test Equipment Requirements

The column in the tool and test equipment requirements chart are as follows:

- a. Tools and Equipment. The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tool for the maintenance function.
- b. Maintenance Category. The codes in this column indicate the maintenance category normally allocated the facility.
- c. Nomenclature. This column lists tools, test, and maintenance equipment required to perform the maintenance functions.
- d. Federal Stock Number. This column lists the Federal stock number.
  - e. Tool Number. Not used.

SECTION II. MAINTENANCE ALLOCATION CHART

20

	MAINTENANCE ALLOCATION CHART	CE A	100	AT	O	2	AR	_	- 1	Ī			$\top$
		M	MAINTENANCE	ENA	NCE		FUNCTIONS	NOI	,, ]	T			
GROUP	COMPONENT ASSEMBLY NOMENCLATURE DEPT.	TEST	PD10ST SERVICE	ALIGN	CALIBRATE	JATZNI	REPLACE	ЯІАЧЭЯ	OVERHAUL	REBUILD	TOOLS AND	REMARKS	
1	RFFL FQUIPMENT FF-11	0	c				0				1	Exterior Test fieldwire for continuity. Replace reel telephone set and	
		ſ.		<u> </u>				[24			1,2	strans Test reel assembly. Adjust	
									H	А	1,2,3	and indifference Complete equipment Complete equipment	
~	CRANK, REFL		0									Lubricate	
٣	HANDLE ASSEMBLY		0									Lubricate	
7	TELEPHONE SET TA-1/PT						0			4		See TM 11-5805-243-12	
5	REELING MACHINE, CABLE, HAND RL-39, RL-39A, B						0						
		,											
AMSEL-MR Form	6031 (Supersedes edition of 1 Feb 1.5, which is obsolete) CE-11			1	+	1	-	1	-			ESC-FM 97-66	7-66

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

		TOOL AND TEST EQUIPMENT REQUIREMENTS		
TOOLS AND	MAINTENANCE		FEDERAL STOCK NUMBER	TOOL NUMBER
		CE-11 (continued)		
7	0	MULTIMETER AN/URM-LO5	6625-581-2036	
N	F,H,D	TOOL EQUIPMENT TE-49	5180-408-1863	
3	H,D	TEST SET, TELEPHONE TS-716( )/U	6625-K61-0707	
			_	

#### APPENDIX D

# ORGANIZATIONAL, DS, GS, AND DEPOT REPAIR PARTS

### Section I. INTRODUCTION

#### D-1. General

This manual contains a list of repair parts required for the performance of organizational maintenance and a list covering the corresponding requirements for direct support, general support, and depot maintenance for Reel Equipment CE-11.

Note. No special tools, test, and support equipment are required for the CE-11.

### D-2. Explanation of Sections

This repair parts and special tools list is divided into three principal parts:

- a. Prescribed Load Allowance List (PLA) —Section II. The PLA is a consolidated listing of repair parts allocated for initial stockage at organizational maintenance. This is a mandatory minimum stockage allowance.
- b. Repair Parts for Organizational Maintenance—Section III. Repair parts authorized for organizational maintenance is included in this section.
- c. Repair Parts for Direct Support, General Support, and Depot Maintenance—Section IV. This chart lists repair parts authorized for maintenance performance at direct support, general support and depot.

### D-3. Explanation of Columns

An explanation of the columns in section II through IV is given below.

- a. Source, Maintenance, and Recoverability Codes, Column 1, Sections III and IV.
  - (1) Source code, column 1a. The selection status and source for the listed item is

noted here. Source codes and their explanations are as follows:

Code Explanation

- P—Applies to repair parts that are stocked in or supplied from the GSA/DSA, or Army supply system, and authorized for use at indicated maintenance categories.
- A—Applies to assemblies that are not procured or stocked as such but are made up of two or more units, each of which carry individual stock numbers and descriptions and are procured and stocked and can be assembled by units at indicated maintenance categories.
- X2—Applies to repair parts which are not stocked. The indicated maintenance category requiring such repair parts will attempt to obtain them through cannibalization; if not obtainable through cannibalization, such repair parts will be requisitioned with supporting justification through normal supply channels.
- (2) Maintenance code, column 1b. The lowest category of maintenance authorized to install the listed item is noted here.

Code Explanation
C Operator/Crew
O Organizational Maintenance
F Direct Support Maintenance

(3) Recoverability code, column 1c. The information in this column indicates whether unserviceable items should be returned for recovery or salvage. Recoverability code and it's explanations are as follows:

*Note.* When no code is indicated in the recoverability column, the part will be considered expendable.

Code Explanation

R—Applies to repair parts and assemblies which are economically repairable at DSU and GSU activities and normally are furnished by supply on an exchange basis.

- b. Federal Stock Number, Column 1, Section II; Column 2, Sections III and IV. The Federal stock number for the item is indicated in this column.
- c. Description, Column 2, Section ; Column 3, Sections through . The Federal item name, a five-digit manufacturer's code, and a part number are included in this column.
- d. Unit of Issue, Column 4, Sections III and IV. The unit used as a basis of issue (e.g. ea, pr, ft, yd, etc) is noted in this column.
- e. Quantity Incorporated in Unit Pack, Section II, column; Column 5, Section III and IV. Not used.
- f. Quantity Incorporated in Unit, Column 6, Sections III and IV. The quantity of repair parts in an assembly is given in this column.
- g. Maintenance Allowance, Column 3, Section II; Column 7, Sections III and IV.
  - (1) The allowance columns are divided into subcolumns. The total quantity of items authorized for the number of equipments supported is indicated in each subcolumn. Items authorized for use as required but not for initial stockage are identified with an asterisk (\*) in the allowance column.
  - (2) The quantitative allowances for organizational category of maintenance represents one initial prescribed load for a 15-day period for the number of equipments supported. Units and organizations authorized additional prescribed loads will multiply the number of prescribed loads authorized by the quantity of repair parts reflected in the appropriate density column to obtain the total quantity of repair parts authorized.
  - (3) Subsequent changes to organizational allowances will be limited as follows: No change in the range of items is authorized. If additional items are considered necessary, recommenda-

- tion should be forwarded to Conmanding General, U.S. Army Electronics Command, ATTN: AMSEL-MR-NMP-CM, Fort Monmouth, N.J. 07703, for exception or revision to the allowance list. Revisions to the range of items authorized will be made by the USA ECOM National Maintenance Point based upon engineering experience, demand data, or TAERS information.
- (4) The quantitative allowances for DS/GS categories of maintenance will represent initial stockage for a 30-day period for the number of equipments supported.
- h. One-Year Allowances Per 100 Equipments/Contingency Planning Purposes, Column 8, Section IV. Opposite the first appearance of each item, the total quantity required for distribution and contingency planning purposes is indicated. The range of items indicates total quantities of all authorized items required to provide for adequate support of 100 equipments for one year.
- i. Illustration, Column 8, Section III; Column 10, Section IV.
  - (1) Figure number, column 8a and 10a. The number of the illustration in which the item is shown is indicated in this column.
  - (2) Item or symbol number, column 8b and 10b. Not used.
- j. Depot Maintenance Allowance Per 100 Equipments, Column 9, Section IV. This column indicates the total quantity of each item authorized depot maintenance for 100 equipments.

### D-4. Location of Repair Parts

- a. When the Federal stock number is unknown follow the procedures given in (1) through (3) below.
  - (1) Use the table of contents to locate the appropriate appendix of the repair parts list.
  - (2) If the item, symbol, and figure number is not known check the description column (column 3) in the repair parts list to locate the part. The parts in

- this column are arranged in alphabetical order.
- (3) Locate the applicable illustration in this manual and note the figure number and item number. Use the repair parts listing and locate the figure number as noted on the illustration.
- b. When the Federal stock number is known, use the repair part listing to find the repair part.

# D-5. Federal Supply Codes

This paragraph lists the Federal supply code and the associated manufacturer's name.

Code Number	Manufacturer's Name
80063	Army Electronics Com- mand Procurement and
96906	Production Directorate.  Military Standard Promulgated by Standardization Div Directorate of Logistic Services DSA.

SECTION II. PRESCRIBED LOAD ALLOWANCE LIST

(1)	(2)	1	5-DAY	ORG.		QT
FEDERAL STOCK NUMBER	DESCRIPTION	(A)	(B)	(c) 21—50	NCE (D) 51-100	INC IN UN Ph
895-127-1000	HANDLE ASSEMBLY: 80063; SM-D-333563	*	*	*	1	
895-127-0999	CRANK, REEL: 80063; SM-C-333569	*	*	*	1	
465-498-7991	STRAP ST-34: 80063; SM-D-333575	*	*	*	1	
465-498-7992	STRAP ST-35: 80063; SM-D-333573					

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SECTION III. REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE

(8)			NUMBER SYMBOL NUMBER							
		FIG	NC	1-1		1-2	1-5	1-1	1-1	
(7) I5 DAY ORG.	LW.	<u>@</u> 00	1–15			٦	Н	7	Ч	
(2) (2)	T. A	ŷ 09	-17			*	*	*	*	
5 DA	MAIN		7-9			*	*	*	*	
			S-1							
		N FINS				Ч	7	7	н	
(5)		2 Z Z								
₹ 3r		т оғ	INN	ea		ea	e a	e	e a	
ORGANIZATIONAL MAINTENANCE	(3)		9	REEL EQUIPMENT CE-11: Portable reel equipment used to set up termporary telephone communications over 1/4 mile or less of light field wire; 80063; SC-A-H709 (This item is nonexpendable)	REEL RL-39; RL-39A; RL-39B ECOM DMG NO. SC-DL-333554	CRANK, REEL: 80063; SM-C-333569	HANDLE ASSEMBLY: 80063; SM-D-333563	STRAP ST-34: 80063; SM-D-333575	STRAP ST-35: 80063: SM-D-333573	
REPAIR PARTS FOR C		MODEL	1 2 3 4 5							
REPAIR	(2) FEDERAL	STOCK		5805-407-7722		5895-127-0999	3895-127-1000	8465-498-7991	8465-498-7992	
		o .o	-	ĸ						
1.4		TNI.	-	Ü		C	0	O	O	
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SECTION IV. REPAIR PARTS, DIRECT SUPPORT, GENERAL SUPPORT AND DEPOT MAINTENANCE

			Т								474-66
(10) ILLUSTRATIONS		(B) ITEM OR	SYMBOL NUMBER								99-12- M.3-1-19-19-19-19-19-19-19-19-19-19-19-19-1
1		(A) FIGURE	NUMBER	1-1		1-2	1-2	1-2	1-1	1-1	
9. A	JIN E	ALW.				7	(Y)		C.	α	
9.91 	U Ø 3	YR. 4	CNJ			10	ω		2	5	,
		© 001	- 1			a	Qi .		Н	Ч	
ALW	GS	@ OS	-12			*	*		*	*	
N.		-	1-50			*	*		*	*	
30 DAY MAINT, ALW.		© 00	1-15			CU	N		Н	7	
DAY	DS	© 09	-17			*	*		*	*	
3(		3 0	I-S			*	*		*	*	
(9)	∑TQ Z	ZZ				Н	٦	1	٦	ч	
(2)	Z U	z S	PK								
		L OF I	LINN	Ø Ø		a a	ω ω	e a	a a	e a	
REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT,	AND DEPOT MAINTENANCE	DESCRIPTION		REEL EQUIPMENT CE-11: Portable real equipment used to set up temporaty telephone communications over 1/4 mile or less.of light field wire; 80063; SC-A-4/T09 (This item is nonexpendable)	REEL RL-39; RL-39A; RL-39B ECOM DWG NO. SC-DL-333554	CRANK, REEL: 80063; SM-C-333569	HANDLE ASSEMBLY: 80063; SM-D-333563	PIN, COTTER: 96906; MS24665-283	STRAP ST-34: 80063; SM-D-333575	STRAP ST-35: 80063; SM-P-33573	
DIRECT SI	POI	СБ	ONI 9								
	MODEL	4 5									
OR	Z	MO	2 3								
S F	-		-								
REPAIR PART		(2) FEDERAL STOCK	NUMBER	5805-407-7722		5895-127-0999	3895-127-1000		8465-498-7991	8465-498-7992	
1 -		COD									
		o .TI				O		CI Er		O	
11	3 0	SCE CI	ROOF	₹ 4		ρ,	Д	X2	д	Д	

# By Order of the Secretary of the Army:

HAROLD K. JOHNSON, General, United States Army, Chief of Staff.

### Official:

KENNETH G. WICKHAM, Major General, United States Army, The Adjutant General.

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USAES (5)	ATAD (10)
Corps (2)	Watertown Arsenal (5)
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318th USASA Bn (5)	USAERDAA (2)
319th USASA Bn (5)	USAERDAW (13)
1st USASA Fld Sta (5)	USACRREL (2)
2d USAS Fld Sta (5)	USARMIS, Argentina (5)
3rd USASA Fld Sta (5)	USARMIS, Ecuador (5)
4th USASA Fld Sta (5)	USARMIS, El Salvador (5)
9th USASA Fld Sta (5)	USARMIS, Liberia (5)
12th USASA Fld Sta (5)	Units org under fol TOE (2 ea):
13th USASA Fld Sta (5)	1-55 1-79 5-27
14th USASA Fld Sta (5)	1-56 1-100 5-35
15th USASA Fld Sta (5)	1–56 1–100 5–55 1–59 1–102 5–37
83rd USASA Sp Op Unit (5)	1–35 1–102 5–37 1–75 5–25 5–127
USATC (2)	1–76 5–26 5–137
WRAMC (1)	1-10 0-20

<b>b</b> -145	7–58	11–157	17-52	17-105	32-56
5-155	7–100	11–158	17-55	17-127	32–68
5-157	7–102	11-500	17-56	17-408	37
7	7–167	(AA-AC)	17-57	19-55	37-100
7–15	7–168	11–587	17-58	19-56	39-51
7–18	8-510	11-592	17-75	29-7	44-85
7–35	10-449	11-597	17-76	29-75	44-87
7–36	11-57	17	17-77	29-76	55-46
7–37	11-97	17–15	17–78	29-105	55-47
7-42	11-98	17–16	17–95	29-106	57
7-45	11–117	17–35	17–98	30-25	57-100
7-55	11–127	17-42	17-100	30-29	
7-57	11–155	17–51			

NG: State AG (3).

USAR: None.

For explanation of abbreviations used see AR 320-50.

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