

15  
RESCINDED

Authority: DA CIR 310-30

Date: 1 APRIL 1965

# DEPARTMENT OF THE ARMY SUPPLY MANUAL

## \*SIG 7 & 8 I-107

### *Organizational Maintenance Allowances*

### *and Field and Depot Maintenance Stockage Guide*

for

## VOLTOHMMETER I-107-A, B, D, E, F, G

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

19 June 1956

1. A copy of SIG 1 and DA Pam 310-21 should be available to every user of the Signal portion of the Army supply manual.

a. SIG 1 explains the purpose and use of the Signal portion of the Army supply manual.

b. DA Pam 310-21 contains alphabetical and numerical indexes of available manuals in the Signal portion of the Army supply manual.

2. Items marked X under expendability note are expendable within the meaning of AR 735-4; nonexpendable items are marked NX.

3. Dry batteries shown are used with the equipment but are not considered part of the equipment. They will not be preshipped automatically but are to be requisitioned in quantities necessary for the particular organization, in accordance with SB 11-6.

4. A percent symbol (%) indicates the item is authorized for use in the category of maintenance indicated and may be requisitioned when required. Not authorized for stockage.

5. The consumption rates for tubes are conservative theoretical estimates, and are provided for use only where no better information, such as data based on operating experience, is available. These figures are based on levels and

requirements for equipment actually in use, not on authorizations or equipment stored in depots.

6. The Federal stock number column lists the 11-digit Federal stock number (or 7-digit Federal item identification number) assigned by the Cataloging Division, OASD (S&L). The numbers are for information only and will not be used in connection with supply operations until implementation of the Federal Cataloging Program is accomplished.

7. SIG 7 & 8 I-107 comprises two parts as follows:

a. *Maintenance Items.* A list of parts for repair and supply facilities.

b. *Basic Issue Items.* A list of component parts showing the quantities of each that comprise a complete operating equipment, including running spares, that is, those spare parts shipped concurrently with the equipment, and accessories.

8. Comments relative to technical data discrepancies in this manual should be forwarded to—

Chief  
Maintenance Analysis Branch  
Signal Corps Engineering Laboratories  
Fort Monmouth, N. J.  
ATTN: SIGEL-PMA.

\* This manual supersedes SIG 7 & 8-I-107, 14 April 1955.

PROPERTY OF THE TECHNICAL LIBRARY  
DO NOT REMOVE FROM BUILDING

i

Copy 1

MAINTENANCE ITEMS

SIGNAL CORPS STOCK NUMBER	FEDERAL STOCK NUMBER	REFERENCE SYMBOL	DESIGNATION BY	DESCRIPTION	QUANTITY PER EQUIP	MAINTENANCE										SUPPLY		EXPENDABILITY NOTE	
						AUTHORIZED ALLOWANCES				STOCK GUIDE					STOCK GUIDE				
						ORGANIZATIONAL		FIELD			DEPOT		DEPOT						
						TACTICAL ORGANIZATION	FIXED STATION	REPAIR SHOPS		REPAIR SHOP	ARMY TAC	BASE							
2ND ECHELON	2ND ECHELON	3RD ECHELON	4TH	5TH															
1-4 EQUIP	5-20 EQUIP	EQUIP	EQUIP	1-4 EQUIP	5-20 EQUIP	50 EQUIP	100 EQUIP	50 EQUIP	100 EQUIP										
3F7107	6625-254-8214			VOLTOHMMETER I-107-A, B, D, E, F, & G: Electronic type; range 0 to 300 v DC in 5 steps; 0 to 10 meg in 5 steps, ±2% accuracy; 400 micro amp sensitivity; 11 meg input impedance on DC voltage range; oper by 2 self-contained 1-1/2 v Sig Battery BA-30 & 1 self contained 90 v Sig Battery BA-40; portable type; E steel case 9-11/32" lg x 5-7/8" wd x 4-1/8" d o/a; meter 4-1/2" lg x 4-1/2" wd; ea															NX
	6135-120-1020			BATTERY, DRY: Sig Battery BA-30; ea	2	-	-	-											X
	6135-120-1011			BATTERY, DRY: Sig Battery BA-40; ea	1	-	-	-											X
1B3018-4	6145-160-3930			CABLE, POWER: 4 cond; ea #18 copper, stranded; 300 v working; rd shaped 0.360", UL type SJO; Army Spec #71-4945 for insulation & jacket only; Whitney Blake Type SJO except for insulation & jacket; ft (H)	2	-	-	-				2	3	2	18				X
	6145-161-0909			CABLE, RADIO FREQUENCY: AN RF Cable RG-58C/U; coaxial; 52 ohm impedance; ft (H)	4	-	-	-				4	8	4	48				X
	5910-101-4023	C1		CAPACITOR, FIXED, MICA DIELECTRIC: 1000 mmf ±10%; 500 vdcw; MIL type CM30B102K; ea (H)	1	-	-	-				1	1	1	6				X
	5910-160-1098	C2 C3		CAPACITOR, FIXED, PAPER DIELECTRIC: 10,000 mmf ±20%; 600 vdcw; MIL type CN35AF103M; ea (H)	2	-	-	-				1	2	1	10				X
	5910-112-7486	C4		CAPACITOR, FIXED, PAPER DIELECTRIC: 50,000 mmf ±10%; 600 vdcw; JAN type CP28ALEF503K; ea (H)	1	-	-	-				1	1	1	6				X
3Z1087-1				CLIP, ELECTRICAL: Alligator style; copper, 2" lg x 5/16" wd x 7/16" h; Mueller Part #60C; ea (O)	1	-	%	%				1	1	5	8	5	42		X
2Z3024-49	404-7872			CONNECTOR, PLUG, ELECTRICAL: 4 rd pol male cont; 90° angle; 1" h x 1-1/2" dia o/a less plug prongs; Eby Part #97-4-506; ea (H)	1	-	-	-				1	2	1	12				X
	5960-188-3956	V1		ELECTRICAL TUBE: MIL type 1LF3; ea (O)	1	1	%	%				1	1	4	4	41			X
2Z5842-12				KNOB: rd; black molded phenolic; JAN type MFE per Spec #MIL-P-14A; for 1/4" dia shaft; single #8-32 set screw; 9/16" lg x 3/4" diam o/a; Kurz Kasch Catalog #S-230-64; ea (O)	2	-	%	%				1	1	2	4	2	20		X
	5355-160-6850			KNOB: Bar type; black bakelite; designed to accomodate 1/4" dia flatted shaft, 3/8" d shaft hole, set screw; straight line marking; 1-1/4" lg x 3/4" wd x 5/8" thk; Harry Davies Part #2300-Black; ea (O)	2	-	%	%				1	1	2	4	2	20		X

SIGNAL CORPS STOCK NUMBER	FEDERAL STOCK NUMBER	REFERENCE SYMBOL	DESIGNATION BY	DESCRIPTION	QUANTITY PER EQUIP	RUNNING SPARES	MAINTENANCE										EXPENDIBILITY NOTE
							AUTHORIZED ALLOWANCES				STOCK GUIDE				SUPPLY		
							ORGANIZATIONAL		FIXED STATION		FIELD REPAIR SHOPS		DEPOT REPAIR SHOPS		ARMY TAC	DEPOT	
							TACTICAL ORGANIZATION	2ND ECHELON	2ND ECHELON	3RD ECHELON	4TH	5TH	50	100	50	100	
1-4	5-20	1-4	5-20	EQUIP	EQUIP	EQUIP	EQUIP	EQUIP	EQUIP	EQUIP	EQUIP	EQUIP					
				I-107-A,B,D,E,F,G (continued)													
3F7107C/A1	6625-268-3888	MA		MULTIMETER, REPLACEMENT: scale marked 0 to 3,10, 30,100,300 v DC range; 50 scale div; 0 to 1000, 10,000, 100,000, 1 $\neq$ 10 meg, ohms DC scale div not equally spaced; black markings on white background; 400 micro amp for full scale deflection, 400 ohms int resistance; flush mtg bakelite case 0.953" d to panel, 4-21/32" wd x 4-5/32" h mtg fl, 2.734" dia meter body; Marion Elec Model 55 per Army spec #71-1370-B; ea (H)	1	-	-	-	-	-	1	2	1	8			
3F3705-12.6				PROD, TEST: Replaceable phone tip; smooth red plastic handle; Sig Dwg #SC-C-6879; ea (F)	1	-	-	-	1	1	1	2	1	12			X
3F3705-12.3	6625-194-2917			PROD, TEST: for voltage & cur measurement; replaceable phone tip; smooth black bakelite handle; Sig Dwg #SC-C-6879, Group III; ea (F)	1	-	-	-	1	1	1	2	1	12			X
	5905-114-4280	R5		RESISTOR, FIXED, COMPOSITION: 16 ohm $\pm$ 5%; 1/2 w; MIL type RC20BF160J; (5905-114-4280 is used in parallel with 5905-114-2880; both use Ref Symbol R5); ea (H)	1	-	-	-	1	1	1	1	1	6			X
	5905-114-2880	R5		RESISTOR, FIXED, COMPOSITION: 18 ohm $\pm$ 5%; 1/2 w; MIL type RC20BF180J; (5905-114-2880 is used in parallel with 5905-114-4280, both use Ref Symbol R5); ea (H)	1	-	-	-	-	-	1	1	1	6			X
	5905-279-3516	R4		RESISTOR, FIXED, COMPOSITION: 91 ohm $\pm$ 5%; 1/2 w; MIL type RC20BF910J; ea (H)	1	-	-	-	-	-	1	1	1	6			X
3RC20GF561K		R15		RESISTOR, FIXED, COMPOSITION: 560 ohm $\pm$ 10%; 1/2 w; MIL type RC20GF561K; ea (H)	1	-	-	-	-	-	1	1	1	6			X
	5905-107-4405	R3		RESISTOR, FIXED, COMPOSITION: 910 ohm $\pm$ 5%; 1/2 w; MIL type RC20BF911J; ea (H)	1	-	-	-	-	-	1	1	1	6			X
	5905-284-2788	R13		RESISTOR, FIXED, COMPOSITION: 1,000 ohm $\pm$ 5%; 1/2 w; MIL type RC20BF102J; ea (H)	1	-	-	-	-	-	1	1	1	6			X
	5905-107-5335	R14		RESISTOR, FIXED, COMPOSITION: 3,900 ohm $\pm$ 10%; 1/2 w; MIL type RC20BF392K; ea (H)	1	-	-	-	-	-	1	1	1	6			X
	5905-114-2771	R2		RESISTOR, FIXED, COMPOSITION: 9,100 ohm $\pm$ 5%; 1/2 w; MIL type RC20BF912J; ea (H)	1	-	-	-	-	-	1	1	1	6			X
3RC20GF163J		R16		RESISTOR, FIXED, COMPOSITION: 16,000 ohm $\pm$ 5%; 1/2 w; MIL type RC20GF163J; ea (H)	1	-	-	-	-	-	1	1	1	6			X
	5905-116-9351	R1		RESISTOR, FIXED, COMPOSITION: 91,000 ohm $\pm$ 5%; 1/2 w; JAN type RC20BF913J; ea (H)	1	-	-	-	-	-	1	1	1	6			X

SIGNAL CORPS STOCK NUMBER	FEDERAL STOCK NUMBER	REFERENCE SYMBOL	DESIGNATION BY	DESCRIPTION	QUANTITY PER EQUIP	1ST ECHOLON	RUNNING SPARES	MAINTENANCE										EXPENDABILITY NOTE					
								AUTHORIZED ALLOWANCES				STOCK GUIDE				SUPPLY							
								ORGANIZATIONAL		FIXED STATION		FIELD		DEPOT		STOCK GUIDE							
								TACTICAL ORGANIZATION 2ND ECHOLON	5-20 EQUIP	2ND ECHOLON EQUIP	FIXED STATION EQUIP	REPAIR SHOPS 3RD ECHOLON	4TH EQUIP	5TH EQUIP	REPAIR SHOP 4TH EQUIP	5TH EQUIP	ARMY TAC 50 EQUIP		DEPOT BASE 100 EQUIP				
				I-107-A,B,D,E,F,G (continued)																			
	5905-109-0723	R10		RESISTOR, FIXED, COMPOSITION: 100,000 ohm ±5%; 1/2 w; MIL type RC20BF104J; ea (H)	1	-	-	-	-	-	-	1	1	1	1	6	X						
	5905-171-2003	R9		RESISTOR, FIXED, COMPOSITION: 200,000 ohm ±5%; 1/2 w; MIL type RC20BF204J; ea (H)	1	-	-	-	-	-	-	1	1	1	1	6	X						
	5905-171-2000	R8		RESISTOR, FIXED, COMPOSITION: 680,000 ohm ±5%; 1/2 w; MIL type RC20BF684J; ea (H)	1	-	-	-	-	-	-	1	1	1	1	6	X						
	5905-120-2066	R11 R12		RESISTOR, FIXED, COMPOSITION: 1 meg ±10%; 1/2 w; MIL type RC20BF105K; ea (H)	2	-	-	-	-	-	-	1	2	1	10	X							
	5905-107-2874	R7		RESISTOR, FIXED, COMPOSITION: 2 meg ±5%; 1/2 w; JAN type RC20BF205J; ea (H)	1	-	-	-	-	-	-	1	1	1	6	X							
	5905-114-2654	R6		RESISTOR, FIXED, COMPOSITION: 6.8 meg ±10%; 1/2 w; MIL type RC20BF685K; ea (H)	1	-	-	-	-	-	-	1	1	1	6	X							
	5905-112-4442	R19		RESISTOR, VARIABLE, WIRE WOUND: 350 ohm ±10%; 2 w; JAN type RA20A1SD351AK; ea (H)	1	-	-	-	-	-	-	1	1	1	6	X							
3RA6610	5905-114-9864	R17		RESISTOR, VARIABLE, WIRE WOUND: 3,500 ohm ±10%; 2 w; JAN type RA20A1SD352AK; ea (H)	1	-	-	-	-	-	-	1	1	1	6	X							
	5905-108-5585	R18		RESISTOR, VARIABLE, WIRE WOUND: 5,000 ohm ±10%; 2 w; JAN type RA20A1SD502AK; ea (H)	1	-	-	-	-	-	-	1	1	1	6	X							
228678.60	5935-243-0466			SOCKET, ELECTRON TUBE: 8 silver pl copper base alloy cont; low loss comp body; 1-19/32" lg x 1-3/16" wd x 11/32" h excluding term g cont; Cinch Part #6973; ea (H)	1	-	-	-	-	-	-	1	1	1	6	X							
	6625-408-3200			STRAP, CARRYING: voltohmmeter carrying strap; solid leather, black; 11" lg x 1" wd x 5/32" thk o/a; Espec part/dwg #27.143; ea (O)	1	-	-	%	%	-	-	-	3	6	3	27	X						
3Z9825-62.414		SW2		SWITCH, ROTARY: 4 position; nonshorting type; 1" lg x 1-15/16" dia; rd shaft 3/4" lg x 1/4" dia; Oak Part #29389-QDH; ea (H)	1	-	-	-	-	-	-	1	2	1	12	X							
3Z9825-62.413	5930-250-5555	SW1		SWITCH, ROTARY: 2 sect; dp 5 throws; 5 switching positions; 1-9/16" lg x 1-7/8" h x 1-9/16" w; rd shaft 7/8" lg x 1/4" dia; oak part/dwg #41111-H2; ea (H)	1	-	-	-	-	-	-	1	2	1	12	X							
1B1018	6145-160-5027			WIRE, ELECTRICAL: Insulated; rd stranded tinned SD copper #18 AWG; soft cotton or rayon wrap; RI; colored black; test lead wire; AN wire WS-16/U; Army Spec #71-3310; ft (F)	4	-	-	-	-	1	1	4	8	4	48	X							
	6145-164-6970			WIRE, ELECTRICAL: Ins; single #18 AWG cond; SD copper tinned; stranded; Buna "S" ins; color coded blue; U.S. Army spec #71-3310 except for color; ft (F)	4	-	-	-	-	1	1	4	8	4	48	X							

## BASIC ISSUE ITEMS

SIGNAL CORPS STOCK NUMBER	FEDERAL STOCK NUMBER	DESIGNATION BY	DESCRIPTION	SUB- ASSEM- BLY	QUANTITIES REQUIRED		
					FOR INITIAL OPERATION	RUNNING SPARES AND ACCESS- ORIES	TOTAL
3F7107	6625-254-8214		VOLTOHMETER I-107-A,B,D,E,F,G: Electronic type, range 0 to 300 v DC in 5 steps; 0 to 10 meg in 5 steps; ±2% accuracy; 400 micro amp sensitivity; 11 meg input impedance on DC voltage range; oper by 2 self-contained 1-1/2 v Sig Battery BA-30 & 1 self contained 90 v Sig Battery BA-40; portable type; E steel case 9-11/32" lg x 5-7/8" wd x 4-1/8" d o/a; meter 4-1/2" lg x 4-1/2" wd; ea				
	5960-188-3956		ELECTRON TUBE: MIL type 1LF3; ea		1	1	2
	6135-120-1011		BATTERY, DRY: Sig Battery BA-40; ea		1	-	1
	6135-120-1020		BATTERY, DRY: Sig Battery BA-30; ea		2	-	2
	6625-408-3200		STRAP, CARRYING: voltohmmeter carrying strap; solid leather, black; 11" lg x 1" wd x 5/32" thk o/a; Espey Part/dwg #27.143; ea		1	-	1

I-107-A,B,D,E,F,G

3

4

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

MAXWELL D. TAYLOR,  
General, United States Army,  
Chief of Staff.

Official:

JOHN A. KLEIN,  
Major General, United States Army,  
The Adjutant General.

Distribution:

*Active Army:*

CNGB (1)  
CIA (1)  
ASA (3)  
NSA (2)  
Tec Svc, DA (1) except  
    CSIGO (21)  
Tec Svc Bd (1)  
Hq CONARC (5)  
CONARC Bd (Incl ea Test Sec) (1)  
Army AA Comd (2)  
OS Maj Comd (5)  
OS Base Comd (5)  
Log Comd (5)  
MDW (1)  
Armies (5)  
Corps (2)  
Div (2)  
Ft & Cp (2) except  
    Ft Holabird (14)  
Gen & Br Svc Sch (2) except  
    Sig Sch (25)  
Gen Depot (5) except  
    Atlanta Gen Depot (none)  
Sig Sec, Gen Depots (25)  
Depots (5) except  
    Sig Depots (25) except  
        Sacramento Sig Depot (30)  
AH (2)  
ASMPA (1)  
AFIP (2)  
WRAMC (2)  
Sp Wpn Comd (15)  
POE (OS) (2)  
Trans Terminal Comd (2)  
Army Terminals (2)  
OS Sup Agencies (1)  
PG (2)  
Arsenals (2)  
Plants & Works (2)  
Sig Fld Maint Shops (5)  
ACS (3)  
Lab (2) except  
Sig Lab (5)  
Mil Dist (1) except  
    Ariz Mil Dist (2)  
Trans Zones (2)

*Active Army:—Con.*

JBUSMC (1)

Units organized under following TOE:

1-107P (2)  
5-15C (2)  
5-16C (2)  
5-35R (2)  
5-37R (2)  
5-215R (2)  
5-216R (2)  
5-217R (2)  
5-225C (2)  
5-226C (2)  
5-227C (2)  
5-525R (2)  
5-526R (2)  
6-100C (2)  
6-101C (2)  
6-125C (2)  
6-126C (2)  
6-135C (2)  
6-136C (2)  
6-200C (2)  
6-201C (2)  
6-225C (2)  
6-226C (2)  
6-235C (2)  
6-236C (2)  
6-300C (2)  
6-301C (2)  
6-315C (2)  
6-316C (2)  
6-325C (2)  
6-326C (2)  
6-401C (2)  
6-415R (2)  
6-416R (2)  
6-435R (2)  
6-501C (2)  
6-515R (2)  
7-11R (2)  
7-15R (2)  
7-31C (2)  
7-32C (2)  
7-35C (2)  
7-36C (2)  
8-75C (2)  
8-76C (2)

Units organized under following TOE:—Con.

8-500R (AA-AH) (2)  
9-65R (2)  
9-66R (2)  
11-7C (9)  
11-16C (8)  
11-57C (15)  
11-97R (24)  
11-98R (9)  
11-116R (1)  
11-117R (13)  
11-127R (45)  
11-128R (12)  
11-500R (AA-AE) (3)  
11-557C (9)  
11-587R (45)  
11-597R (4)  
17-2R (2)  
17-17R (2)  
17-25C (2)  
17-26C (2)  
17-27C (2)  
17-32R (2)

Units organized under following TOE:

17-35C (2)  
17-36C (2)  
17-37C (2)  
17-45C (2)  
17-46C (2)  
17-51R (2)  
17-55R (2)  
17-56R (2)  
17-57C (2)  
17-62R (2)  
20-300R (2)  
20-511R (2)  
20-512R (2)  
44-12R (2)  
44-15R (2)  
44-16R (2)  
44-75C (2)  
44-76C (2)  
44-115R (2)  
44-116R (2)  
44-145R (2)  
44-146R (2)  
44-16R (2)  
55-57C (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 SR 320-50-1.

☆U.S. GOVERNMENT PRINTING OFFICE: 1956—361280/2289