DEPARTMENT OF THE ARMY TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS TELETYPEWRITER SETS AN/GGC-3 AND AN/GGC3A AND TELETYPEWRITER REPERFORATOR-TRANSMITTERS TT-76/GGC, TT-76A/GGC, TT-76B/GGC, AND TT-76C/GGC FSN 5815-503-3309

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

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^{*}This manual supersedes so much of TM 11-5815-238-12, 6 December 1965, including all changes, as pertains to organizational maintenance repair parts and special tools lists.

1-1. Scope

This manual lists repair parts and special tools required for the performance of organizational maintenance of the AN/GGC-3, AN/GGC-3A, TT-76/ GGC, TT/76A/GGC, TT-76B/GGC, and TT-76C/GCC. The PCCN for the AN/GGC-3 and AN/GGC-3A is GCWAAA and GGWAAB for the TT-76/GGC, TT-76A/GGC, TT-B/GGC, and TT-76C/GGC.

1-2. General

This repair parts and special tools list is divided into the following sections:

a. Prescribed Load Allowance (PLA) - Section II. Not applicable.

b. Repair Parts List – *Section III.* A list of repair parts authorized for the performance of maintenance at the organizational level. This repair parts list is arranged in alphabetical order.

c. Special Tools, Test and Support Equipment - Section IV. Not applicable.

d. Index – Federal Stock Number and Reference Number Cross-Reference to Figure and Item Number - Section V. A list, in ascending numerical sequence, of all Federal stock numbers appearing in the listings, followed by a list, in alphabetic sequence, of all reference numbers appearing in the listings. Federal stock number and reference numbers are cross-referenced to each illustration figure and item number or reference designation appearance.

1-3. Explanation of Columns

The following provides an explanation of columns in the tabular lists:

a. Source, Maintenance, and Recoverability Codes (SMR).

(1) *Source code.* Indicates the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are —

Code Explanation

PA — Item procured and stocked for anticipated or known usage.

- PB Item procured and stocked for insurance purposes because essentiality dictates that a minimum quantity be available in the supply systems.
- 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,

Code

Explanation

procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfitting. 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 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 direct support or general support 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 direct support maintenance level.
- MH Item to be manufactured or fabricated at general support maintenance level.
- MD Item to be manufactured or fabricated at 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

Code

Explanation

available through salvage, requisition.

- XC Installation drawing, diagram instruction sheet, field service drawing, that is identified by manufacturers' part number.
- XD Support items can be requisitioned with justification.

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded XA and aircraft support items as restricted by AR 700-42.

(2) Maintenance code. Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code Format as follows:

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

Code

Application/Explanation

0 -Support item is removed, replaced, used at the organizational level of maintenance.

NOTE

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

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

(b) Repair (fourth position). The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). When a maintenance code is not used a dash (-) sign is entered. For multiservice equipment/systems or when a code is entered, this position will contain one of the following maintenance codes as assigned by the service(s) that require the code:

Application/Explanation Code

0 -The lowest maintenance level capable of complete repair of the support item is the organizational level.

Application/Explanation

Code

- F The lowest maintenance level capable of complete repair of the support item is direct support.
- Н— The lowest maintenance level capable of complete repair of the support item is general support.
- D The lowest maintenance level capable of complete repair of the support item is the depot level.
- L Repair restricted to designated Specialized Repair Activity.
- Non-repairable. No repair is authorized. Z —
- 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: Code

Explanation

- Z Nonrepairable item. When unserviceable, condemn and dispose at the level indicated in the first digit of the maintenance code.
- Repairable item. When uneconomically re-0 pairable, condemn and dispose at organizational level.
- F Repairable item. When uneconomically repairable, condemn and dispose at the direct support level.
- Н Repairable item. When uneconomically repairable, condemn and dispose at the general support level.
- Repairable item. When beyond lower level D repair capability, return to depot. Condemnation and disposal not authorized below depot level.
- Repairable item. Repair, condemnation, L and disposal not authorized below depot/Specialized Repair Activity level.
- Item requires special handling or condemn a-A – tion procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material).

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

c. Description. Indicates the Federal item name and a minimum description required to identify the

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

d. Unit of Measure (U/M). Indicates the standard or basic quantity by which the listed item is used in the performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation; e.g., ea, in, pr, etc., and is the basis used to indicate quantities and allowances in subsequent columns. When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

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

f. 15-Day Organizational Maintenance Allowance.

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

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

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

g. Illustration. This column is divided as follows:

(1) *Figure number.* Indicates the figure number of the illustration on which the item is shown in TM 11-5815-238-35.

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

1-4. Special Information

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

Code	Used on
AAA	AN/GGC-3
AAB	AN/GGC-3A

Code	Used on
AAC	TT-76/GGC
AAD	TT-76A/GGC
AAE	TT-76B/GGC
AGO	TT-76C/GGC

b. The following publications pertain to the equipment and its components:

TM 11-5815-238-12 Organizational Maintenance Manual Including Repair Parts and Special Tool Lists: Teletypewriter Sets AN/ GGC-3 and AN/GGC-3A and Teletypewriter Reperforator-Transmitters TT-76/GGC, TT-76A/GGC, TT-76B/GGC, and TT-76C/ GGC.

TM 11-5815-238-35 DS, GS, and Depot Maintenance Manual: Teletypewriter Sets AN/GCC-3 and AN/GGC-3A and Teletypewriter Reperforator-Transmitter TT-76/GGC, TT-76A/GGC, TT-76B/GGC, and TT-76C/GGC.

1-5. Location of Repair Parts

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

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

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

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

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

d. When the FSN, reference number, figure

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

1-6. Abbreviations

Not applicable.

1-7. Reporting of Equipment Publication Improvements

The reporting of errors, omissions, and recommenda-

tions for improving this publication by the individual user is encouraged. Reports should be submitted or. DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-CW, Fort Monmouth, NJ, 07703.

TM 11- SECTIO (1)	5815-238-20P N III	(2)		(4)	(5)	(6)				(7)	
SMR CODE	FEDERAL STOCK NUMBER	DESCRIPTION REFERENCE NUMBER & MFR CODE	USABLE ON CODE	UNIT OF MEAS	QTY INC IN UNIT		Y ORGANI ENANCE A (b) 6-20	ZATIONAL LW (c) 21-50	(d) 51-100	ILLUSTRA (a) FIGURE NO	ATION (b) ITEM NO
PACZZ	6240-617-1717	LAMP, INCANDESCENT 1 15T7DC (08808)	AAC , AAD , AAE , AGO	EA	2	*	*	*	*	4-75	11
PACZZ	6240-617-1717	LAMP, INCANDESCENT DS1 15T7DC (08808)	AAC, AAD, AAE, AGO	EA	REF	*	*	*	*	4-76	DS1
PACZZ	7530-634-6237	TAPE, RECORDING, TELETYPEWRITER 10982 10982 (82423)	AAC, AAD, AAE, AGO	EA	1	*	*	*	*		
XDOZZ		RIBBON, FRINTING, TELETYPEWRITER 10901 DDDR311D (81348)	AAC , AAD , AAE , AGO	EA	1	*	*	*	*		
PACZZ	5920-581-4144	FUSE, CARTRIDGE F1 2 AMP, 250 V DC MDX2 (71400)	AAC	EA	1	*	*	*	*		Fl
PACZZ	5920-581-4144	FUSE, CARTRIDGE F1 2 AMP, 250 V DC MDX2 (71400)	AAD , AAE , AGO	EA	2	*	*	*	*		Fl
PACZZ	5920-581-4144	FUSE, CARTRIDGE F2 2 AMP, 250 V DC MDX (71400)	AAD , AAE , AGO	EA	REF	*	*	*	*		F2
PACZZ	6240-155-8706	LAMP, INCANDESCENT 20791 MS15571-2TB14 (96906)	AAD , AAE , AGO	EA	1	*	*	*	*	4-71	
PACZZ	6240-155-8706	LAMP, INCANDESCENT DS2 20791 MS15571-2TB14 (96906)	AAD , AAE , AGO	EA	1	*	*	*	*	4-72	DS2

SECTION V

INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER

CROSS-REFERENCE 1							
NOTE: LATEST FEI			ENTS ARE INCLUDED AT	END OF INDEX			
	FIGURE	ITEM		FIGURE	ITEM		
STOCK NUMBER	NO.	NO.	STOCK NUMBER	NO.	NO.		
5920-581-4144		F1	6240-155-8706	4-71			
5920-581-4144		F2	6240-155-8706	4-72	DS2		
			7530-634-6237				
REFERENCE	MFR	FIG.	ITEM	REFERENCE	MFR	FIG.	ITEM
NO.	CODE	NO.	NO.	NO.	CODE	NO.	NO.
DDDR311D	81348			MS15571-2TB14	96906	4-72	DS2
MDX2	71400		F1	10982	82423		
MDX2	71400		F2	15T7DC	08808	4-75	I1
MS15571-2TB14	96906	4-71		15T7DC	08808	4-76	DS1
LATEST FEDERAL SI	OCK NUMBER A	SSIGMENTS					

7

	FIGURE	ITEM
STOCK NUMBER	NO.	NO.
6240-617-1717	4-75	I1
6240-617-1717	4-76	DS1

By Order of the Secretary of the Army:

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

Official:

VERNE L. BOWERS Major General, United States Army The Adjutant General

Distribution: Active A

<i>ve Army:</i>	
USASA (2)	USARMIS (1)
CNGB (1)	USAERDAA (1)
ACSC-E (2)	USAERDAW (1)
Dir of Trans (1)	Sig FLDMS (1)
COE (1)	Units org under fol TOE (1 ea.):
TSG (1)	6-555
USAARENBD (1)	6-556
AMC (1)	6-557
MICOM (2)	6-615
TECOM (2)	6-617
TRADOC (2)	7
ARADCOM (2)	7-42
ARADCOM Rgn (2)	9
OS Maj Comd (4)	9-22
LOGCOMD (3)	9-86
USACC (4)	10-201
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USAINTCS (3)	11-217
USAADS (2)	11-218
USAFAS (2)	11-500(AA-AC)
USAARMS (2)	17
USAIS (2)	29-1
USAES (2)	29-5
AD (1) except	29-6
SAAD (30)	29-21
LBAD (14)	29-45
TOAD (14)	29-46
ATAD (10)	29-51
USA Dep (2)	29-56
Sig Sec USA Dep (2)	29-65
Sig Dep (2)	32-52
ATS (1)	37
MAAG (1)	55-458
WRAMC (1)	57

ARNG: State AG (3); units-same as Active Army. USAR: None.

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

DOPE AN CAREFU	RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS SOMETHING WRONG WITH PUBLICATION FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS) FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS) FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS) DATE SENT
PUBLICATION NUMBER	PUBLICATION DATE PUBLICATION TITLE
BE EXACT PIN-POINT WHERE IT IS PAGE GRAPH FIGURE TAB NO. TAB NO	
PRINTED NAME, GRADE OR TITLE AND	TELEPHONE NUMBER SIGN HERE
DA 1 JUL 79 2028-2	PREVIOUS EDITIONS ARE OBSOLETE. BARE OBSOLETE. P.SIF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

THE METRIC SYSTEM AND EQUIVALENTS

'NEAR MEASURE

. Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches

- 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
- 1 Kilometer = 1000 Meters = 0.621 Miles

VEIGHTS

Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces 1 Kilogram = 1000 Grams = 2.2 lb.

1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces

1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

APPROXIMATE CONVERSION FACTORS

APPROXIMATE	CONTERSION FACTORS	
TO CHANGE	το	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	
Square Feet	Square Meters	
Square Yards	Square Meters	
Square Miles	Square Kilometers	
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	
Fluid Ounces	Milliliters	
nts	Liters	
arts	Liters	
allons	Liters	
Ounces	Grams	
Pounds	Kilograms	
Short Tons	Metric Tons	
Pound-Feet	Newton-Meters	
Pounds per Square Inch	Kilopascals	
Miles per Gallon	Kilometers per Liter	
Miles per Hour	Kilometers per Hour	1 600
Mines per mour	Infometers per mour	1.005
TO CHANGE	то	MULTIPLY BY
TO CHANGE Centimeters	TO Inches	
		0.394
Centimeters	Inches	0.394 3.280
Centimeters Meters.	Inches Feet	0.394 3.280 1.094
Centimeters Meters Meters Kilometers	Inches Feet Yards Miles	0.394 3.280 1.094 0.621
Centimeters . Meters. Meters. Kilometers Square Centimeters	Inches Feet Yards Miles Square Inches	0.394 3.280 1.094 0.621 0.155
Centimeters . Meters. Meters. Kilometers . Square Centimeters . Square Meters.	Inches Feet Yards Miles Square Inches Square Feet	0.394 3.280 1.094 0.621 0.155 10.764
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters .	Inches Feet Yards Miles Square Inches Square Feet. Square Yards	0.394 3.280 1.094 0.621 0.155 10.764 1.196
Centimeters Meters Meters Kilometers Square Centimeters Square Meters Square Meters Square Kilometers	Inches Feet Yards Miles Square Inches Square Feet	0.394 3.280 1.094 0.621 0.155 10.764 1.196 0.386
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters .	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres	0.394 3.280 1.094 0.621 0.155 10.764 1.196 0.386 2.471
Centimeters Meters Meters Kilometers Square Centimeters Square Meters Square Meters Square Meters Square Kilometers Square Hectometers Cubic Meters	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres Cubic Feet	0.394 3.280 1.094 0.621 0.155 10.764 1.196 0.386 2.471 35.315
Centimeters Meters Meters Kilometers Square Centimeters Square Meters Square Meters Square Kilometers Square Hectometers	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres	0.394 3.280 1.094 0.621 0.155 10.764 1.196 0.386 2.471 35.315 1.308
Centimeters Meters Meters Square Centimeters Square Meters Square Meters Square Meters Square Hectometers Cubic Meters Cubic Meters Milliliters	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres Cubic Feet Cubic Feet Cubic Yards Fluid Ounces	0.394 3.280 1.094 0.621 0.155 10.764 1.196 0.386 2.471 35.315 1.308 0.34
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Kilometers . Square Hectometers . Cubic Meters . Cubic Meters . Milliliters . Liters .	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres Cubic Feet Cubic Feet Cubic Yards Fluid Ounces Pints	0.394 3.280 1.094 0.621 0.155 10.764 1.196 0.386 2.471 35.315 1.308 0.034 2.113
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Kilometers . Square Hectometers . Cubic Meters . Cubic Meters . Milliliters . Liters . Liters .	Inches Feet Yards Miles Square Inches Square Feet. Square Yards Square Miles. Acres Cubic Feet Cubic Feet Cubic Yards. Fluid Ounces Pints. Quarts	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Kilometers . Square Hectometers . Cubic Meters . Cubic Meters . Milliliters . Liters . Liters . 'ers .	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres Cubic Feet Cubic Yards Fluid Ounces Pints. Quarts Gallons	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Kilometers . Square Hectometers . Cubic Meters . Cubic Meters . Milliliters . Liters . Liters . ms .	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres Cubic Feet Cubic Feet Cubic Yards Fluid Ounces Pints Quarts Gallons Ounces	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Kilometers . Square Hectometers . Cubic Meters . Cubic Meters . Milliliters . Liters . Liters .	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres Cubic Feet Cubic Feet Cubic Yards Fluid Ounces Pints Quarts Gallons Ounces Pounds	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Meters . Square Hectometers . Cubic Meters . Cubic Meters . Milliliters . Liters . Liters . ograms . Metric Tons .	Inches Feet	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Centimeters . Meters . Meters . Square Centimeters . Square Meters . Square Meters . Square Meters . Square Hectometers . Cubic Meters . Cubic Meters . Cubic Meters . Milliliters . Liters . Liters . ograms . Metric Tons . Newton-Meters .	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres Cubic Feet Cubic Feet Cubic Yards Fluid Ounces Pints Quarts Gallons Ounces Pounds Short Tons Pounds-Feet	$\begin{array}{c} 0.394\\ 3.280\\ 1.094\\ 0.621\\ 0.155\\ 10.764\\ 1.196\\ 3.386\\ 2.471\\ 35.315\\ 1.308\\ 0.034\\ 2.113\\ 1.057\\ 0.264\\ 0.035\\ 2.205\\ 1.102\\ 0.738\\ \end{array}$
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Kilometers . Square Hectometers . Cubic Meters . Cubic Meters . Milliliters . Liters . iers . ograms . Metric Tons . Newton-Meters . Kilopascals .	Inches Feet	$\begin{array}{c} 0.394\\ 3.280\\ 1.094\\ 0.621\\ 0.155\\ 10.764\\ 1.196\\ 0.386\\ 2.471\\ 35.315\\ 1.308\\ 0.034\\ 2.113\\ 1.057\\ 0.264\\ 0.035\\ 2.205\\ 1.102\\ 0.738\\ 0.145\\ \end{array}$
Centimeters Meters Meters Square Centimeters Square Meters Square Meters Square Meters Square Hectometers Cubic Meters Cubic Meters Cubic Meters Liters Liters Square Milliliters Liters Square Meters Meters Square Meters Square Metric Tons Newton-Meters	Inches Feet Yards Miles Square Inches Square Feet Square Yards Square Miles Acres Cubic Feet Cubic Feet Cubic Yards Fluid Ounces Pints Quarts Gallons Ounces Pounds Short Tons Pounds-Feet	$\begin{array}{c} 0.394\\ 3.280\\ 1.094\\ 0.621\\ 0.155\\ 10.764\\ 1.196\\ 0.386\\ 2.471\\ 35.315\\ 1.308\\ 0.034\\ 2.113\\ 1.057\\ 0.264\\ 0.035\\ 2.205\\ 1.102\\ 0.738\\ 0.145\\ 2.354\\ \end{array}$

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches

1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet

1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

TEMPERATURE

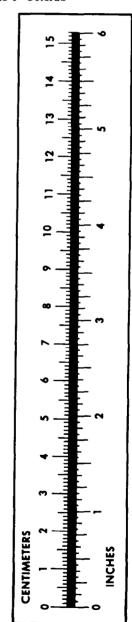
 $5/9(^{\circ}F - 32) = ^{\circ}C$

212° Fahrenheit is evuivalent to 100° Celsius

90° Fahrenheit is equivalent to 32.2° Celsius

32° Fahrenheit is equivalent to 0° Celsius

 $9/5C^{\circ} + 32 = {}^{\circ}F$



PIN: 010023-000