## **TECHNICAL MANUAL**

# ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

FOR

# TRANSCEIVER MULTIPLEXER TD-1288/GRC (NSN 5820-01-090-1414), TD-1289(V)1/GRC (NSN 5820-01-090-5407), TD-1289(V)2/GRC, AND TD-1289(V)3/GRC

HEADQUARTERS, DEPARTMENT OF THE ARMY

23 APRIL 1982

TECHNICAL MANUAL No. 11-5820-880-20P HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON, DC, 23 April 1982

#### ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST FOR

## TRANSCEIVER MULTIPLEXER TD-1288/GRC (NSN 5820-01-090-1414), TD-1289(V)1/GRC (NSN 5820-01-090-5407), TD-1289(V)2/GRC, AND

TD-1289(V)3/GRC

Current as of 9 November 1981

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-8 located in back of this manual direct to Commander, US Army Communications-Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. In either case, a reply will be furnished direct to you.

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# SECTION I

#### 1. Scope

This manual lists spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of organizational maintenance of TD-1288/GRC, TD-1289(V)1/GRC, TD-1289(V)2/GRC and TD-1289(V)3/GRC. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

#### 2. General

Code

This Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of spares and repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in numeric sequence, with the parts in each group listed in figure and item number sequence.

b. Section III. Special Tools List. Not applicable.

c. Section IV. National Stock Number and Part Number Index. A list, in National item identification number (NIIN) sequence, of all National stock numbers (NSN) appearing in the listings, followed by a list, in alphameric sequence, of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

#### 3. Explanation of Columns

a. Illustration. This column is divided as follows:

(1) *Figure number*. Indicates the figure number of the illustration on which the item is shown.

(2) *Item number*. The number used to identify item called out in the illustration.

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

(1) Source code. Source codes indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

#### Definition

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

PD- Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject

#### to automatic replenishment. 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) The maintenance code entered in the third position will indicate the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position will indicate one of the following levels of maintenance:

Application/Explanation

O- Support item is removed, replaced, used at the organizational level.

(b) The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). This position will contain one of the following maintenance codes:

Code Application/Explanation

D- The lowest maintenance level capable of complete repair of the support item is the depot level.

Z- Nonreparable. No repair is authorized.

(3) *Recoverability code*. Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the Uniform SMR Code format as follows:

# Recoverability codes

Code

Definition

- Z- Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.
- D- Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.

*c. National Stock Number.* Indicates the National stock number assigned to the item and will be used for requisitioning purposes.

*d. Federal Supply Code for Manufacturer (FSCM).* The FSCM is a 5-digit numeric code listed in SB 708-41/42 which is used to identify the manufacturer, distributor, or Government agency, etc.

*e. Part Number.* Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the

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design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

#### NOTE

When a stock number item is requisitioned, the repair part received may have a different part number than the part being replaced.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item.

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

*h. Quantity Incorporated in Unit.* Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable, (e.g., shims, spacers, etc).

#### 4. Special Information

Usable on codes are shown in the description column. Uncoded items are applicable to all models. Identification of the usable on codes used in this publication are:

Code	
DYC	TD-1288/GRC
DYD	TD-1289(V)1/GRC
DYE	TD-1289(V)2/GRC
DYF	TD-1289(V)3/GRC

#### 5. How to Locate Repair Parts

**a**. When National stock number or part number is unknown.

(1) *First.* Using the table of contents, determine the functional group within which the item belongs. This is necessary since illustrations are prepared for functional groups and listings are divided into the same groups.

(2) *Second*. Find the illustration covering the functional group to which the item belongs.

(3) *Third.* Identify the item on the illustration and note the illustration figure and item number of the item.

(4) *Fourth.* Using the Repair Parts Listing, find the figure and item number noted on the illustration.

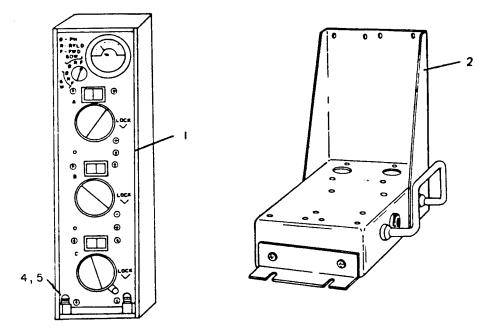
b. When National stock number or part number is known.

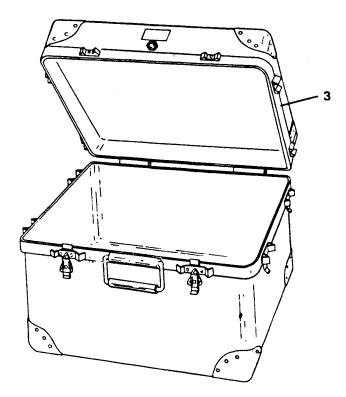
(1) *First.* Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.

(2) *Second*. After finding the figure and item number, locate the figure and item number in the repair parts list.

# 6. Abbreviations Not applicable.

(Next printed page is 4)





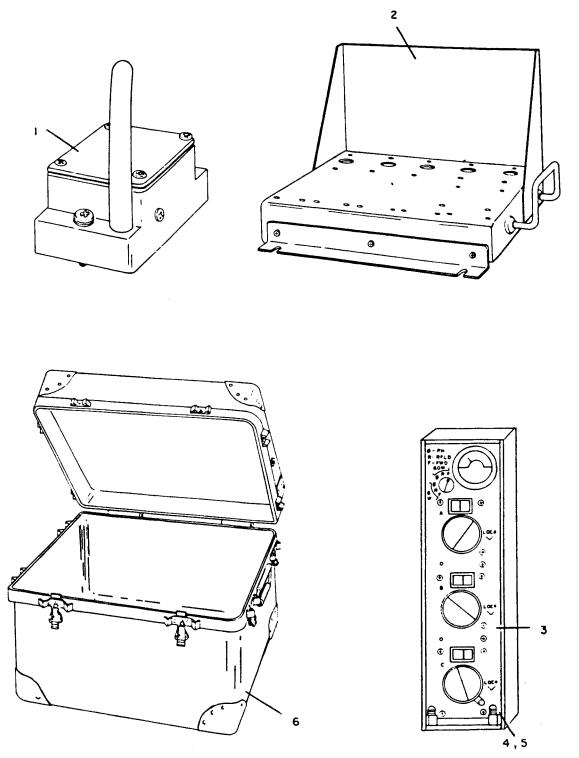
EL5SF001

Figure 1. Transceiver Multiplexer TD-1288/GRC.

#### TM11-5820-880-20P

SECTION	II								
(1)		(2)	(3)	(4)	(5)	(6)		(7)	(8)
ILLUSTR	ATION					DESCRIPTION			QTY
(a)	(b)		NATIONAL						INC
FIG	ITEM	SMR	STOCK		PART				IN
NO	NO	CODE	NUMBER	FSCM	NUMBER		USABLE ON CODE	U/M	UNIT
						GROUP 00 TRANSCEIVER MULTIPLEXER			
						TD-1288/GRC			
1	1	PAODD	5915-01-090-9450	80058	F-1482( )/GRC	FILTER, BAND PASS DYC		EA	2
1	2	PAODD	5820-01-091-0836	80058	CU-2266/GRC	COUPLER DYC		EA	1
1	3	PDODD	5820-01-091-0835	80058	CY-7775()/GRC	CASE, MULTIPLEXER DYC		EA	1
1	4	PAOZZ	5305-00-054-6668	96906	MS51957-43	SCREW, MACHINE DYC		EA	2
T	4	PAUZZ	5305-00-054-0000	90900	MS51957-45	SCREW, MACHINE DIC		LA	2
1	5	PAOZZ	5310-00-880-5978	96906	MS15795-807	WASHER, FLAT DYC		EA	2
-	5	FROZZ	5510 00 380-5978	20200	101010/00-807	HADIBIC/FERT DIC		10PA	4

5



EL5SF002

Figure 2. Transceiver Multiplexers TD-1289(V)1/GRC, TD-1289(V)2/GRC, and TD-1289(V)3/GRC.

						TM11-5820-880-20P			
SECTI	ON II								
(1)		(2)	(3)	(4)	(5)	(6)		(7)	(8)
ILLUS	TRATION					DESCRIPTION			QTY
(a)	(b)		NATIONAL						INC
FIG	ITEM	SMR	STOCK		PART				IN
NO	NO	CODE	NUMBER	FSCM	NUMBER		USABLE ON CODE	U/M	UNIT
						GROUP 00 TRANSCEIVER MULTIPLEXERS TD-1289(V)1/GRC,			
						TD-1289(V)12/GRC AND TD-1289(V)13/GRC			
2	1	PDODD	5820-01-091-0834	80058	MX-10080( )/GRC	TERMINATION UNIT DYD,DYE,DYF		EA	V
2	2	PAODD	5820-01-091-0837	80058	CU-2267/GRC	COUPLER DYD, DYE, DYF		EA	1
2	3	PAODD	5915-01-090-9450	80058	F-1482()/GRC	FILTER, BAND PASS DYD, DYE, DYF		EA	v
2	4	PAOZZ	5310-00-880-5978	96906	MS15795-807	WASHER, FLAT DYD, DYE, DYF		EA	2
2	5	PAOZZ	5305-00-054-6668	96906	MS51957-43	SCREW, MACHINE DYD, DYE, DYF		EA	2
2	6	PDODD	5820-01-090-6802	80058	CY-7776()/GRC	CASE, MULTIPLEXER DYD, DYE, DYF		EA	1

STOCK NU	MBER	FIGURE NO.	ITEM NO.	STOCK NU	MBER	FIGURE NO.	ITEM NO.
	054-6668 054-6668	1 2	4 5		090-9450	2	3 1
5310-00-	880-5978	1	5	5820-01-	091-0835	1	3
	880-5978 090-6802	2 2	4 6		091-0836 091-0837	1 2	2 2
5915-01-	090-9450	1	1				
		FIGURE	ITEM			FIGURE	ITEM
FSCM	PART NUMBER	NO.	NO.	FSCM	PART NUMBER	NO.	NO.
80058	CU-2266/GRC	1	2	96906	MS15795-807	1	5
80058	CU-2267/GRC	2	2	96906	MS15795-807	2	4
80058	CY-7775()/GRC	1	3	96906	MS51957-43	1	4
80058	CY-7776()/GRC	2	6	96906	MS51957-43	2	5
80058	F-1482()/GRC	1	1	80058	MX-10080( )/GRC	2	1
80058	F-1482()/GRC	2	3				

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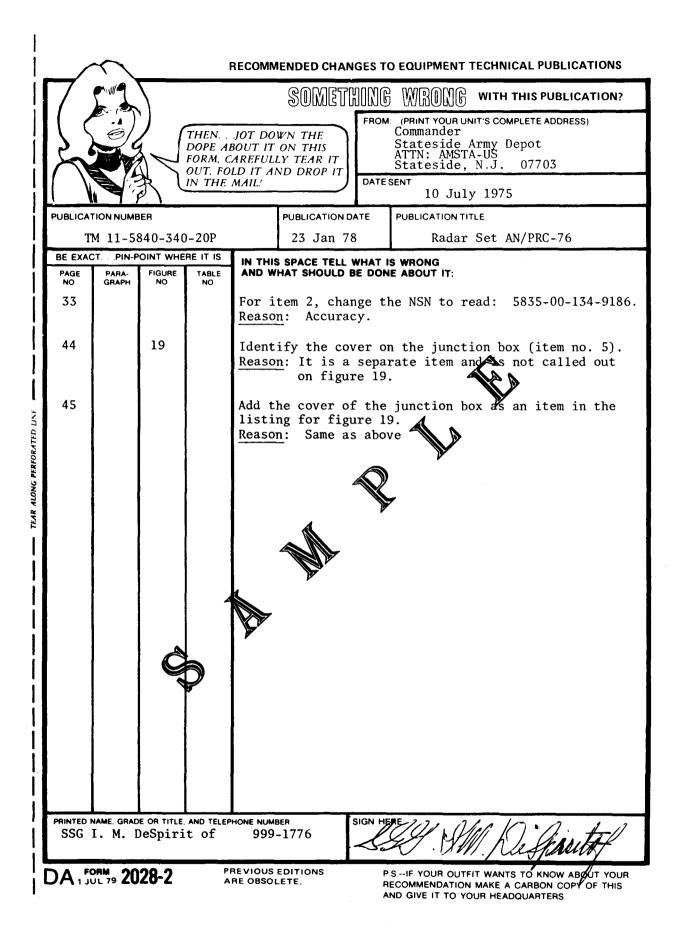
**Official:** 

ROBERT M. JOYCE Brigadier General, United States Army The Adjutant General

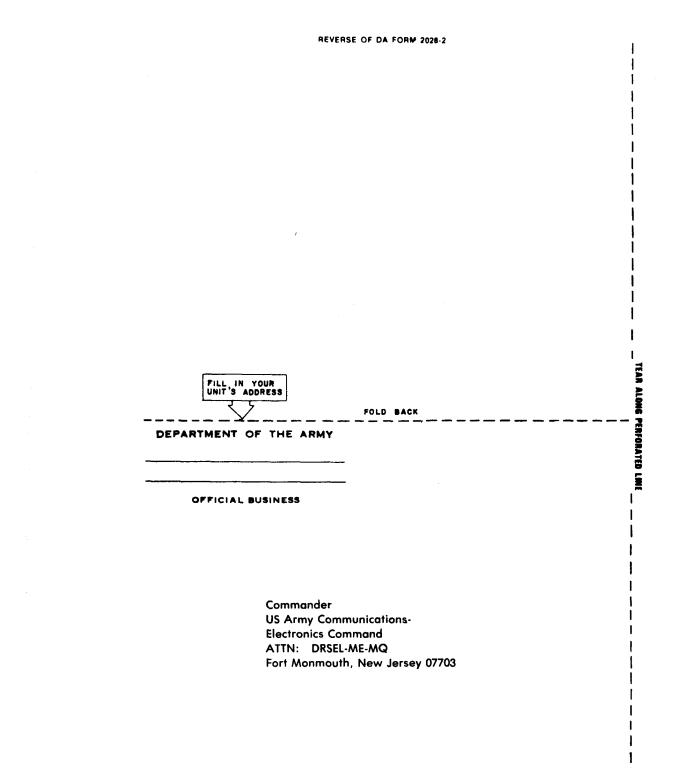
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## THE METRIC SYSTEM AND EQUIVALENTS

#### **'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	CONVERSION 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	6.451
Square Feet	Square Meters	
Square Yards	Square Meters	
Square Miles	Square Kilometers	
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	
Cubic Yards	Cubic Meters	
Fluid Ounces	Milliliters	
1ts	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 flour	1.003
TO CHANGE	то	MULTIPLY BY
<b>TO CHANGE</b> Centimeters	TO Inches	
		0.394
Centimeters	Inches	0. <b>394</b> 3.280
Centimeters Meters Meters Kilometers	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	0.394 3.280 0.621 0.155 10.764 1.196 0.386 2.471
Centimeters . Meters . Meters . Kilometers . Square Centimeters . 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 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 . Cubic Meters . Cubic 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 35.315 1.308
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Kilometers . Square Hectometers . Cubic Meters .	Inches Feet	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 . Milliliters . Liters .	Inches Feet	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Kilometers . Square Hectometers . Cubic Meters . Cubic Meters . Milliliters .	Inches Feet	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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 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 . 'ers . ms .	Inches Feet	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Centimeters . Meters . Meters . Kilometers . Square Centimeters . Square Meters . Square Meters . Square Kilometers . Square Hectometers . Cubic Meters . Cubic Meters . Milliliters . Liters . Liters . .ograms .	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 .	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	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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 . Kilopascals .	Inches Feet	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Centimeters . Meters . Meters . Kilometers . 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	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

#### 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

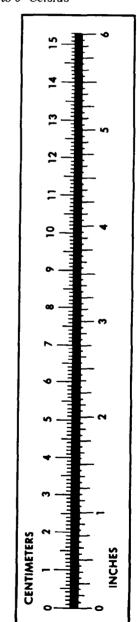
 $5/9(^{\circ}F - 32) = ^{\circ}C$ 

212° Fahrenheit is evuivalent to 100° Celsius

90° Fahrenheit is equivalent to 32.2° Celsius

32° Fahrenheit is equivalent to 0° Celsius

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



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