

TECHNICAL MANUAL

**ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT
MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST**

**FOR
PROCESSOR M68KMACS (EXORMACS)**

**ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT
 MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
 FOR
 PROCESSOR M68KMACS (EXORMACS)
 Current as of 14 March 1985**

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 2028-2 located in back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-ME-MP, Fort Monmouth, NJ 07703-5007.

In either case, a reply will be furnished direct to you.

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SECTION I

INTRODUCTION

1. Scope

This manual lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of organizational, direct support, and general support maintenance of the Processor M68KMACS. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

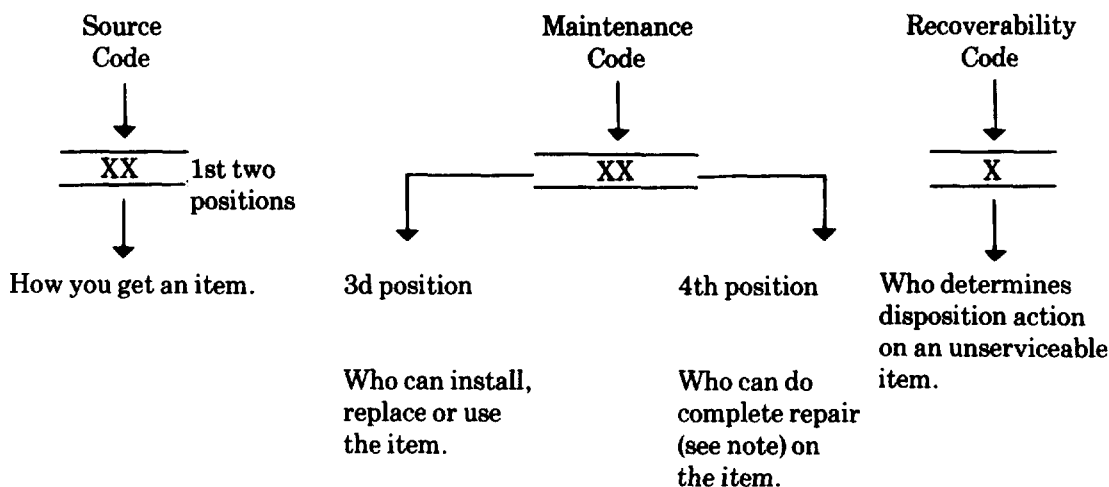
2. General

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 by this RPSTL 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 ascending numeric sequence, with the parts in each group listed in ascending item number sequence. Figure numbers are listed directly beneath the group header.
- 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 numbered items appearing in the listing, 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 (Section II and III)

- a. *Item No. (Column (1)).* Indicates the number used to identify items called out in the illustration.
- b. *SMR Code (Column (2)).* The source, maintenance, and recoverability (SMR) code is a five-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:



NOTE

Complete repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

- (1) *Source code.* The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item equipment. Explanations of source codes follows:

Code

Explanation

PA
PB
PC
PD
PE
PF
PG

Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the third position of the SMR code.

NOTE

Items coded PC are subject to deterioration.

KD
KF
KB

Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the third position of the SMR code. The complete kit must be requisitioned and applied.

MO—Made at org/AVUM category
MF—Made at DS/AVUM category
MH—Made at GS category
ML—Made at Specialized Repair Activity (SRA)
MD—Made at Depot

Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the description and usable on code (UOC) column and listed in the Bulk Material group of the repair parts list. If the item is authorized to you by the third position code of the SMR code, but the source code indicates it is made at a higher category, order the item from the higher category of maintenance.

AO—Assembled by org/AVUM category
AF—Assembled by DS/AVIM category
AH—Assembled by GS category
AL—Assembled by SRA
AD—Assembled by Depot

Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the category of maintenance indicated by the source code. If the third position code of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher category, order the item from the higher category of maintenance.

Code

Explanation

- XA—Do not requisition an “XA” coded item. Order its next higher assembly.
- XB—If an “XB” item is not available from salvage, order it using the FSCM and part number given.
- XC—Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturers part number.
- XD—Item is not stocked. Order an “XD” coded item through normal supply channels using the FSCM and part number given, if no NSN is available.

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded “XA” or those aircraft support items restricted by requirements of AR 750-1.

(2) *Maintenance code.* Maintenance codes tell you the category of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

- (a) The maintenance code entered in the third position tells you the lowest maintenance category authorized

to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following categories of maintenance.

<i>Code</i>	<i>Application/Explanation</i>
C —	Crew or operator maintenance done within organizational or aviation maintenance.
O —	Organizational or aviation unit category can remove, replace, and use the item.
F —	Direct support or aviation intermediate category can remove, replace, and use the item.
H —	General support category can remove, replace, and use the item.
L —	Specialized repair activity can remove, replace, and use the item.
D —	Depot category can remove, replace, and use the item.

(b) The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance category with the capability to do complete repair (i. e., perform all authorized repair functions). This position will contain one of the following maintenance codes.

NOTE

Some limited repair may be done on the item at a lower category of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

<i>Code</i>	<i>Application/Explanation</i>
O —	Organizational or aviation unit is the lowest category that can do complete repair of the item.
F —	Direct support or aviation intermediate is the lowest category that can do complete repair of the item.
H —	General support is the lowest category that can do complete repair of the item.
L —	Specialized repair activity (designate the specialized repair activity) is the lowest category that can do complete repair of the item.
D —	Depot is the lowest category that can do complete repair of the item.
Z —	Nonreparable. No repair is authorized.
B —	No repair is authorized. (No parts or special tools are authorized for the maintenance of a "B" coded item). However, the item may be reconditioned by adjusting, lubricating, etc., at the user category.

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

Recoverability

<i>Codes</i>	<i>Application/Explanation</i>
Z —	Nonreparable Item. When unserviceable, condemn and dispose of the item at the category of maintenance shown in the third position of SMR code.
O —	Reparable item. When uneconomically repairable, condemn and dispose of the item at organizational or aviation unit category.
F —	Reparable item. When uneconomically repairable, condemn and dispose of the item at direct support or aviation intermediate category.
H —	Reparable item. When uneconomically repairable, condemn and dispose of the item at general support category.
D —	Reparable item. When beyond lower category repair capability, return to depot. Condemnation and disposal of item not authorized below depot category.
L —	Reparable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
A —	Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

c. *FSCM (Column (3)).* The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

d. *Part Number (Column (4)).* 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.

NOTE

When you use a NSN to requisition an item, the item you receive may have a different part number from the part ordered.

- e. *Description and Usable on Code (UOC) (Column (5)).* This column includes the following information.
 - (1) The Federal item name and, when required, a minimum description to identify the item.
 - (2) The statement "END OF FIGURE" appears just below the last item description in Column (5) for a given figure in both section II and section III.
- f. *Qty (Column (6)).* 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 the quantity is variable and the quantity may vary from application to application.

4. Explanation of Columns (Section IV)

a. National Stock Number (NSN) Index.

(1) *Stock number column.* This column lists the NSN by National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN. When using this column to locate an item, ignore the first four digits of the NSN. When requisitioning items use the complete NSN (13 digits).

(2) *Fig. column.* This column lists the number of the figure where the item is identified/located. The illustrations are in numerical sequence in sections II and III.

(3) *Item column.* The item number identifies the item associated with the figure listed in the adjacent Fig. column. This item is also identified by the NSN listed on the same line.

b. *Part Number Index.* Part numbers in this index are listed by part number in ascending alphanumeric sequence.

(1) *FSCM column.* This column lists the Federal supply code for manufacturer (FSCM).

(2) *Part number column.* This column indicates the part number assigned to the item.

(3) *Stock number column.* This column lists the National stock number for the associated part number and manufacturer identified in the part number and FSCM columns to the left.

(4) *Fig. column.* This column lists the number of the figure where the item is identified/located in sections II and III.

(5) *Item column.* The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

5. Special Information

a. *Short Form Repair Parts and Special Tools List (RPSTL).* This Repair Parts and Special Tools List is a short form RPSTL. All repair parts will be listed in the next revision.

b. *Associated Publications.* The publication listed below pertains to the Processor M68KMACS and its components:

TM 11-7440-323-13, Processor M68KMACS (Exormacs)

c. *National Stock Numbers.* National stock numbers (NSN's) that are missing from P source coded items have been applied for and will be added to this TM by future change/revision when they are entered in the Army Master Data File (AMDF). Until the NSN's are established and published, submit exception requisitions to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-MM, Fort Monmouth, NJ 07703-5006 for the part required to support your equipment.

6. How to Locate Repair Parts

a. When National stock number or part number is not known.

(1) *First.* Using the table of contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.

(2) *Second.* Find the figure covering the assembly group or subassembly group to which the item belongs.

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

(4) *Fourth.* Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.

(5) *Fifth.* Refer to the Part Number Index to find the NSN, if assigned.

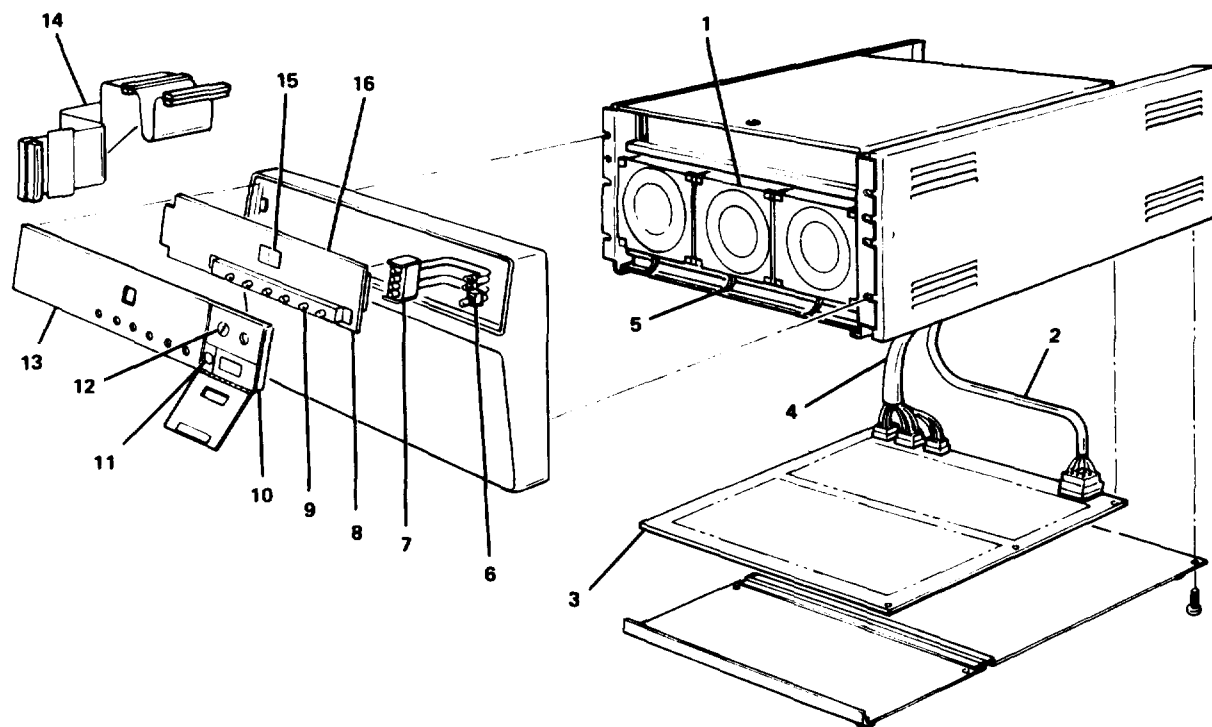
b. When National stock number or part number is known.

(1) *First.* Using the index of National stock numbers and part numbers, find the pertinent National stock number or part number. The NSN index is in National item identification number (NIIN) sequence (para 4a(1)). The part numbers in the part number index are listed in ascending alphanumeric sequence (para 4b). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.

(2) *Second.* After finding the figure and item number, verify that the item is the one you're looking for, then locate the item number in the repair parts list for the figure.

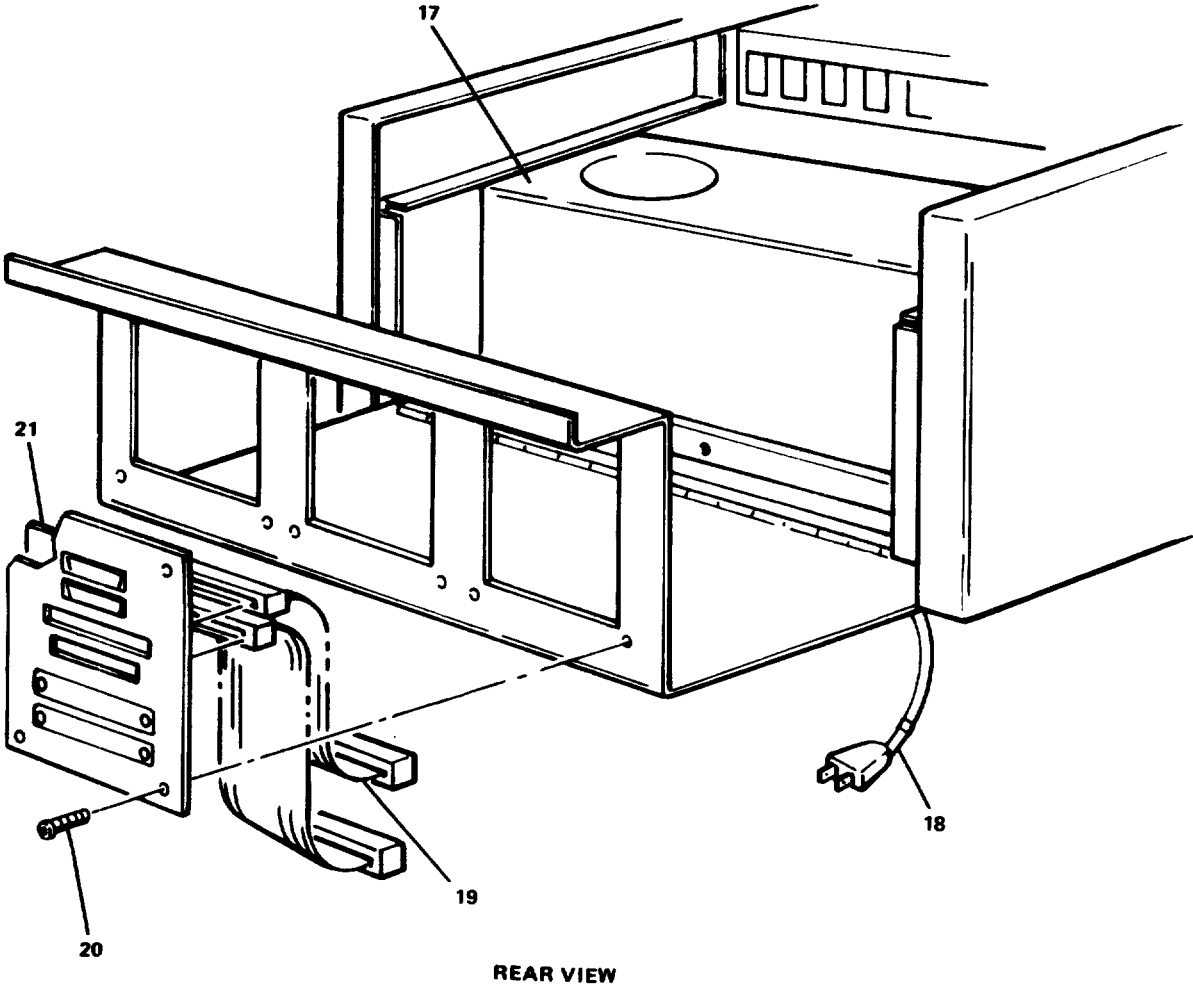
7. Abbreviations

Not applicable.



EL9RC001

Figure 1. Exormacs Processor M68KMACS (Sheet 1 of 2)



EL9RC002

Figure 1. Exormacs Processor M68KMACS (Sheet 2 of 2)

(1)	(2)	(3)	(4)	(5)	(6)
ITEM NO	SMR CODE	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODES(UOC)	QTY
GROUP 00 PROCESSOR M68KMACS (EXORMACS)					
FIG. 1					
1	PAOZZ	04713	59NW9807A28	FAN	1
2	PAOOO	04713	30DW2017B02	WIRING HARNESS.....	1
3	PAODD	04713	01DW1212B01	BACKPLANE ASSEMBLY	1
4	PAOOO	04713	30CW2016B01	WIRING HARNESS	1
5	PAOOO	04713	30EW2018B01	WIRING HARNESS	1
6	PAOZZ	04713	40NW9801B05	SWITCH PUSH	1
7	PAODD	04713	30BW2012B01	CABLE ASSEMBLY	1
8	PAODD	04713	01DW1235B01	PRINTED WIRING BOAR	1
9	PAODD	04713	40NW9801B23	SWITCH PUSH	6
10	PAOZZ	04713	40NW9801A95	SWITCH PUSH	1
11	PAOZZ	04713	65NW9622A20	FUSE CARTRIDGE	1
12	PAODD	04713	40NW9801B22	SWITCH LOCK	1
13	PAODD	04713	01EW2011B01	PANEL ASSEMBLY CONT	1
14	XBOZZ	04713	30CW2013B01	CABLE ASSEMBLY	1
15	PAODD	04713	72NW9624A03	DISPLAY OPTOELECTRO	2
16	PADDD	04713	84DW6242B01	PRINTED WIRING BOAR	1
17	PAODD	04713	01NW9804B88	POWER SUPPLY	1
18	PAOOO	04713	30DW2019B01	WIRING HARNESS	1
19	XBODD	04713	30CW2022B01	CABLE ASSEMBLY	1
20	XBODD	04713	30CW2023B01	CABLE ASSEMBLY	1
21	PAODD	04713	01DW1242B01	PRINTED WIRING BOAR	1

END OF FIGURE

SECTION IV

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

**TM11-7440-323-24P
TM-CODE GB**

STOCK NUMBER	FIG.	NATIONAL STOCK NUMBER INDEX ITEM	STOCK NUMBER	FIG.	ITEM
4140-01-186-8786	1	1			
7025-01-186-8787	1	13			
7025-01-186-8788	1	7			
7025-01-186-9007	1	5			
7025-01-186-9008	1	18			
7025-01-186-9009	1	4			
7025-01-186-9010	1	2			
6130-01-186-9013	1	17			
7025-01-186-9191	1	3			
7025-01-186-9232	1	8			
7025-01-186-9233	1	21			
5930-01-187-8576	1	12			
5930-01-187-8577	1	9			
5930-01-187-8578	1	6			
5999-01-192-3874	1	16			

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

FSCM	PART NUMBER	PART NUMBER INDEX STOCK NUMBER	FIG.	ITEM
04713	01DW1212B01	7025-01-186-9191	1	3
04713	01DW1235B01	7025-01-186-9232	1	8
04713	01DW1242B01	7025-01-186-9233	1	21
04713	01EW2011B01	7025-01-186-8787	1	13
04713	01NW9804B88	6130-01-186-9013	1	17
04713	30BW2012B01	7025-01-186-8788	1	7
04713	30CW2013B01		1	14
04713	30CW2016B01	7025-01-186-9009	1	4
04713	30CW2022B01		1	19
04713	30CW2023B01		1	20
04713	30DW2017B02	7025-01-186-9010	1	2
04713	30DW2019B01	7025-01-186-9008	1	18
04713	30EW2018B01	7025-01-186-9007	1	5
04713	40NW9801A95		1	10
04713	40NW9801B05	5930-01-187-8578	1	6
04713	40NW9801B22	5930-01-187-8576	1	12
04713	40NW9801B23	5930-01-187-8577	1	9
04713	59NW9807A28	4140-01-186-8786	1	1
04713	65NW9622A20		1	11
04713	72NW9624A03		1	15
04713	84DW6242B01	5999-01-192-3874	1	16

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IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.

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The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 decagram = 10 grams = .35 ounce
 1 hectogram = 10 decagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
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