TECHNICAL MANUAL

# DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS) FOR

# PULSE FORM RESTORER TD-206B/G (NSN 5805-01-020-2251)

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HEADQUARTERS DEPARTMENT OF THE ARMY Washington, DC, 1 January 1989

### Technical Manual

No. 11-5805-367-34P-4

# DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS) FOR

## PULSE FORM RESTORER TD-206B/G (NSN 5805-01-020-2251)

### Current as of 1 October 1988

# 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-LC-ME-PS, Fort Monmouth, New Jersey 07703-5000. In either case, a reply will be furnished direct to you.

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<sup>\*</sup>This manual supersedes TM 11-5805-367-40P-4, 30 November 1979.

## 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 direct support and general support maintenance of the TD-206B/G. 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:

<u>a</u>. <u>Section II. Repair Parts List.</u> 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 list are composed of functional groups in ascending item number sequence. Figure numbers are listed directly beneath the group header.

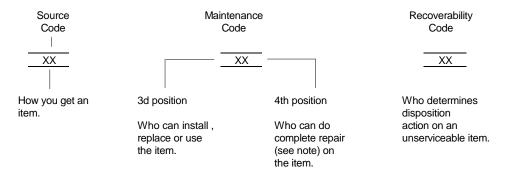
b. <u>Section III. Special Tools List</u>. Not applicable.

<u>c.</u> <u>Section IV</u>. Cross-Reference Indexes. 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. The figure number and item number index lists figure and item numbers in numeric sequence and cross-references National stock number , Federal Supply Code for Manufacturer and part numbers.

3. Explanation of Columns (Section II and III)

<u>a.</u> Item No. (Column (1)). Indicates the number used to identify items called out in the illustration.

<u>b.</u> <u>SMR Code (Column (2)).</u>The source, maintenance, and recoverability (SMR) code is a fiveposition 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.
FG	NOTE
	Items coded PC are subject to deterioration.
KD	Items with these codes are not to be

KD	
Κ	
KB	

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. <u>Code</u>

MO -	Made at org/AVUM	Items with these codes are not to be requested/requisitioned individually.
MF -	category Made at DS/AVIM	They must be made from bulk material which is identified by the part number in the description and usable on code
MH -	category Made at GS category )	(UOC) column and listed in the Bulk Material group of the repair parts list. If the item is authorized to you by the
ML -	Made at Specialized Repair	third position code of the SMR code , but the source code indicates it is made at a higher category , order the
	Activity	item from the higher category of maintenance.
MD -	(SRA) Made at Depot	maintenance.
	•	
AO -	Assembled	Items with these codes are not to be
	by org/AVUM category	requested/requisitioned individually. The parts that make up the assembled
AF -	Assembled	item must be requisitioned or fabricated
	by DS/AVIM	and assembled at the category of
	category	maintenance indicated by the source
AH -	Assembled	code. If the third position code of
	by GS	the SMR code authorizes you to replace
AL -	category Assembled	the item, but the source code indicates the item is assembled at a higher
	by SRA	category, order the item from the
AD -	Assembled by Depot	higher category of maintenance.

## <u>Code</u>

## **Explanation**

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 FCSM and part number given.
- XC Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
- XD Item is not stocked. Order an "XD" coded item through normal supply channels-using the FSCM and part number given , if not 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) <u>Maintenance code.</u> 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.

Code

### Application/Explanation

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. ,

## <u>Code</u>

### Application/Explanation

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.

# Application/Explanation

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 codes

# Application/Explanation

- 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 reparable, condemn and dispose of the item at organizational or aviation unit category.
- F Reparable item. When uneconomically reparable, condemn and dispose of the item at direct support or aviation intermediate category.
- H Reparable item. When uneconomically reparable, 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 appropriate manuals/directives for specific instructions.

<u>c.</u> <u>FSCM (Column (3)).</u> 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.

<u>d</u>. <u>Part Number (Column (4))</u>. 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.

Code

# NOTE

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

e. <u>Description and Usable on Code</u> (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

<u>f.</u> <u>Qty (Column (6)).</u> 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) <u>Stock number column</u>. 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) <u>Fig. column</u>. 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.

<u>b.</u> <u>Part Number Index</u>. Part numbers in this index are listed by part number in ascending alphameric sequence.

(1) <u>FSCM column</u>. This column lists the Federal supply code for manufacturer.

(2) <u>Part number column</u>. This column indicates the part number assigned to the item.

(3) <u>Stock number .column</u>. 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) <u>Fig. column</u>. This column lists the number of the figure where the item is identified/located in sections II and III.

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

c. Figure and Item Number Index.

(1) <u>Fig. column</u>. This column lists the number of the figure where the item is identified/located in sections II and III.

(2) <u>Item column</u>. The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

(3) <u>Stock number column</u>. This column lists the National stock number for the item.

(4) <u>FSCM column</u>. The Federal supply code for manufacturer (FSCM) is a 5-digit numeric code used to identify the manufacturer , distributor , or Government agency , etc. , that supplies the item.

(5) <u>Part number column</u>. Indicates the primary number used by the manufacturer (individual , 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 item.

5. Special Information

<u>a</u>. <u>Associated Publications</u>. The following publications pertain to the TD-206B/G and its components:

TM 11-5805-367-12, Multiplexers TD-202/U, 203/U, 204/U, 352U, 353/U, Restorers, Pulse Form TD-206/G, 206B/G and Converters, Telephone Signal, CV-1548/G and 1548A/G TM 11-5805-367-20P-1 through 5, Restorers, Pulse Form TD-206G and B/G TM 11-5805-367-35-1, Restorers, Pulse Form, TD-202/U and 203/U TM 11-5805-367-35-2, Restorer, Pulse Form, TD-204/U TM 11-5805-367-35-3, Restorers, Pulse Form, TD-352/U and 353/U TM 11-5805-367-35-4, Restorer, Pulse Form, TD-206/G

<u>b.</u> <u>National Stock Numbers</u>. 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-LC-MM, Fort Monmouth, NJ 07703-5000 for the part to support your equipment.

6. How to Locate Repair Parts

<u>a</u>. When National stock number or part number is not known.

(1) <u>First.</u> 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) <u>Second</u>. Find the figure covering the assembly group or subassembly group to which the item belongs.

(3) <u>Third.</u> Identify the item on the figure and note the item number.

(4) <u>Fourth</u>. Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.

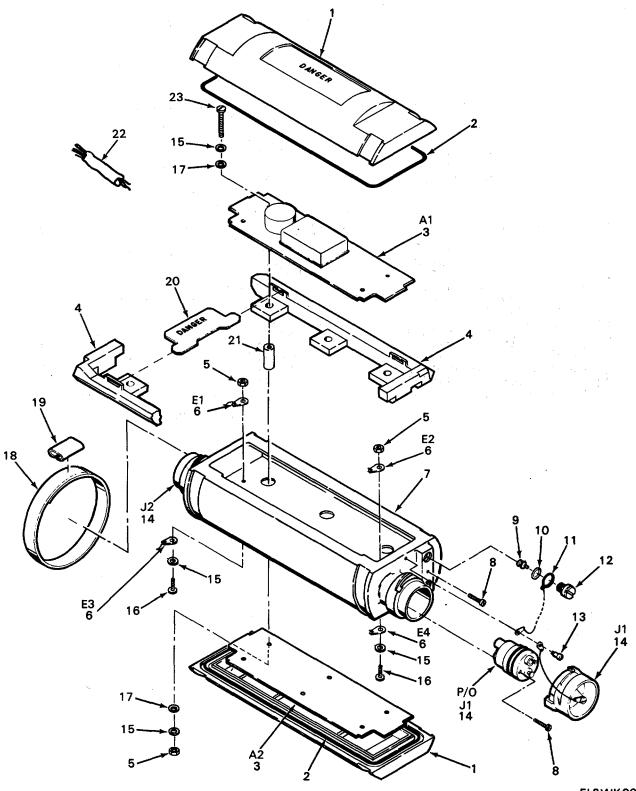
- (5) <u>Fifth</u>. Refer to the Part Number Index to find the NSN, if assigned..
- b. When National stock number or part number is known.

(1) <u>First</u>. Using the index of National stock numbers and part **n**umbers, 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 alphameric sequence (para 4b). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.

(2) <u>Second.</u> 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.



EL3WK001

Figure 1. Pulse Form Restorer TD-206B/G

NUMBER

CODE

NO

(3)

FSCM

(6)

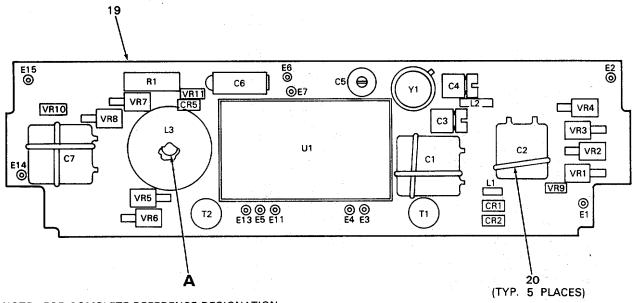
## **GROUP 01 PULSE FORM RESTORER** TD-206B/G

# FIGURE 1

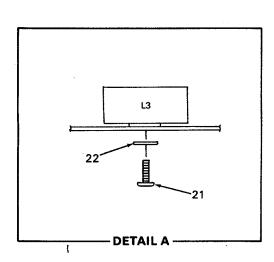
1	XBDZZ	80063	SM-D-938520	COVER , RESTORER	2
2	PADZZ	02697	0739-0139-5613	PACKING , PREFORMED	2
3	PADDD	80063	SM-D-938514	CIRCUIT CARD ASSEMB (SEE FIGURE 2	2
				FOR BREAKDOWN)	
4	PADZZ	07199	NE6297	MOUNT , RESILIENT	4
5	PADZZ	96906	MS21043-06	NUT, SELF LOCKIN, EX 8	8
6	PADZZ	96906	MS77066-2	TERMINAL , LUG	4
7	XBDZZ	80063	SM-D-938517	HOUSING , PLS RESTR	1
8	PADZZ	96906	MS51963-34	SETSCREW	1
9	PADZZ	71279	4265-1-0519	TERMINAL , FDTHRU , INS	4
10	PADZZ	96906	MS28775-012	PACKING , PREFORMED	4
11	PADZZ	84256	53363	WIRE ROPE ASSEMBLY	4
12	PADZZ	80063	SM-C-938519	PLUG.MACHINE TH READ	4
13	PADZZ	80063	SM-B-388427	SCREW, EXT RLV BODY	1
13	PADZZ	80063	SC-B-388427	SCREW , SHOULDER	4
14	PADZZ	21947	110-598925	CONNECTOR, RCPT, ELEC	2
15	PADZZ	80205	NAS62OC6	WASHER , FLAT	14
16	PADZZ	96906	M551957-29	SCREW , MACHINE	2
17	PADZZ	96906	MS51859-3	WASHER , FLAT	12
18	XBDZZ	80063	SM-B-884459	STRAP STEEL	2
19	XBDZZ	80063	SM-A-884483	SEAL , STRAPPING	2
20	PADZZ	80063	SM-B-938522	SHIELD , WARNING	4
21	PADZZ	80205	NAS43DD1-51	SPACER , SLEEVE	6
22	PADZZ	80063	SM-A-938527	LEAD , ELECTRICAL	1
23	PADZZ	96906	MS51957-35	SCREW , MACHINE	6

END OF FIGURE

1-1

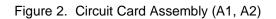


NOTE: FOR COMPLETE REFERENCE DESIGNATION PREFIX WITH A1 OR A2



REF. DES.	ITEM NO.	REF. DES.	ITEM NO.	REF. NO.	ITEM NO.	REF. NO.	ITEM NO.	
CR1	1	E1	, 7	E15	7	VR3	15	1.
CR2	1	E2	· 7	L1	8	VR4	15	
CR5	1	E3	7	L2	9	VR5	15	
C1	2	, E4	7	L3	10	VR6	15	
C2	3	E5	• 7	R1	11	VR7	15	
С3	4	E6 <sup>`</sup>	7	T1	12	VR8	15	
C4	4	E7 <sub>.</sub>	7	Т2	13	VR9	16	
C5	5	E11	7	U1	14	VR10	16	
C6	6	E1 <sub>.</sub> 3	7	VR1	15	VR11	17	
C7	2	E14	7	VR2	15	Y1	18	

EL3WK002



SECTION II (1) (2)	(3)	TM 11-5805-367- (4)	34P-4 (5)	(6)
ITEM SMR NO CODE	FSCM	PÀRT NUMBER	DESCRIPTION AND USABLE ON CODES(UOC)	QTY
			GROUP 02 CIRCUIT CARD ASSEMBLY (A1 , AZ)	
			FIGURE 2	
2 PADZZ 3 PADZZ 4 PADZZ 5 PADZZ 6 PADZZ 7 PADZZ 8 PADZZ 9 PADZZ 10 PADZZ 11 PADZZ 13 PADZZ 14 PADZZ 15 PADZZ 16 PADZZ 17 PADZZ 18 PADZZ	81349 81349 81349 96906 80063 07388 81349	JANTXIN647-1 D3020T332J0 CD3011621J03 PC51J5R5 CV31E600 M39003/01-2994 SE23XC02 MS75084-03 SM-B-530007-1 26350 RBR54L106R0AM EP4716 EP4774 954185 GZ71229A JANIN4973 JAN1N754A BK5W SM-D-938515 2829-75-2 M551957-15	SEMICOND DVC , DIODE . CAPACITOR , FIXED , MIC CAPACITOR , FXD , MICA CAPACITOR , VARIABLE CAPACITOR , VARIABLE CAPACITOR , FIXED , ELE TERMINAL , STUD COIL , RADIO FREQUENC COIL , RADIO FREQUENC COIL , RF REACTOR , AF RESISTOR , FIXED , WW TRANSFORMER , PULSE TRANSFORMER , RADIO F MICROCIRCUIT , LINEAR SEMICOND DVC , DIODE SEMICOND DVC , DIODE SEMICOND DVC , DIODE SEMICOND UCTOR DEVIC CRYSTAL UNIT , QUARTZ PRINTED WIRING BD CLAMP , LOOP SCREW , MACHINE WASHER , FLAT	2 1 2 1 1 1 1 1 1 1 1 8 2 1 1 1 5 1

END OF FIGURE

# CROSS REFERENCE INDEXES

STOCK NUMBER     FIG.     ITEM     STOCK NUMBER     FIG.     ITEM       5305-00-054-5649     2     21     1     16     1     16     1	TEM
5305-00-054-6653 1 16	
5305-00-054-6659 1 23	
5950-00-063-8418 2 12	
5310-00-140-4894 1 17	
5910-00-156-7293 2 6	
5950-00-377-9882 2 8	
5910-00-436-2576 2 5	
5330-00-584-0265 1 10	
5305-00-719-5342 1 8	
5310-00-773-7624 1 15	
5310-00-782-1349 2 22	
5940-00-816-6103 1 6	
5961-00-852-7549 2 17	
5310-00-878-3291 1 5	
5910-00-924-4307 2 4	
5940-00-926-0015 2 7	
5950-00-945-3757 2 13	
5910-00-949-5246 2 2	
5805-01-058-6786 1 3	
5365-01-131-2455 1 12	

# TM 11-5805-367-34P-4

# CROSS REFERENCE INDEXES

# NATIONAL STOCK NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
71034	BK5W		2	18
14655	CD3011621J03		2	3
81349	CV31E600	5910-00-436-2576	2	5
00853	D3020T332J0	5910-00-949-5246	2	2
97722	EP4716	5950-00-063-8418	2	12
97722	EP4774	5950-00-945-3757	2	13
24444	GZ71229A		2	15
81350	JANTXIN647-1		2	1
81350	JAN1N4973		2	16
81350	JAN1N754A	5961-00-852-7549	2	17
96906	MS15795-804	5310-00-782-1349	2	22
96906	MS21043-06	5310-00-878-3291	1	5
96906	MS28775-012	5330-00-584-0265	1	10
96906	MS51859-3	5310-00-140-4894	1	17
96906	M551957-15	5305-00-054-5649	2	21
96906	M551957-29	5305-00-054-6653	1	16
96906	MS51957-35	5305-00-054-6659	1	23
96906	M551963-34	5305-00-719-5342	1	8
96906	MS75084-03	5950-00-377-9882	2	8
96906	MS77066-2	5940-00-816-6103	1	6
81349	M39003/01-2994	5910-00-156-7293	2	6
80205	NAS43DDI-51		1	21
80205	NAS620C6	5310-00-773-7624	1	15
07199	NE6297		1	4
81349	PC51J5R5	5910-00-924-4307	2	4
81349	RBR54L106ROAM		2	11
80063	SC-B-388427		1	13
81349	SE23XC02	5940-00-926-0015	2	7
80063	SM-A-884483		1	19
80063	SM-A-938527		1	22
80063	SM-B-388427		1	13
80063	SM-B-530007-1		2	9
80063	SM-B-884459		1	18
80063	SM-B-938522		1	20
80063	SM-C-938519	5365-01-131-2455	1	12
80063	SM-D-938514	5805-01-058-6786	1	3
80063	SM-D-938515		2	19
80063	SM-D-938517		1	7
80063	SM-D-938520		1	1
02697	0739-0139-5613		1	2
21947	110-598925		1	14
07388	26350		2	10
98159	2829-75-2		2	20
71279	4265-1-0519		1	9
84256	53363		1	11
49956	954185		2	14

# CROSS REFERENCE INDEXES

# NATIONAL STOCK NUMBER INDEX

FIG 1	ITEM 1	STOCK NUMBER	FSCM 80063	PART NUMBER SM-D-938520
1	2		02697	0739-0139-5613
1	3	5805-01-058-6786	80063	SM-D-938514
1	4		07199	NE6297
1	5	5310-00-878-3291	96906	M521043-06
1	6	5940-00-816-6103	96906	MS77066-2
1	7		80063	SM-D-938517
1	8	5305-00-719-5342	96906	MS51963-34
1	9		71279	4265-1-0519
1	10	5330-00-584-0265	96906	MS28775-012
1	11		84256	53363
1	12	5365-01-131-2455	80063	SM-C-938519
1	13		80063	SC-B-388427
1	13		80063	SM-B-388427
1	14		21947	110-598925
1	15	5310-00-773-7624	80205	NA5620C6
1	16	5305-00-054-6653	96906	M551957-29
1	17	5310-00-140-4894	96906	MS51859-3
1	18		80063	SM-B-884459
1	19		80063	SM-A-884483
1	20		80063	SM-B-938522
1	21		80205	NAS43DD1-51
1	22		80063	SM-A-938527
1	23	5305-00-054-6659	96906	M551957-35
2	1	5040 00 040 5040	81350	JANTXIN647-1
2	2	5910-00-949-5246	00853	D3020T332JO
2	3	5040 00 004 4007	14655	CD3011621J03
2 2	4	5910-00-924-4307	81349	PC51J5R5
2	5	5910-00-436-2576	81349	CV31E600
2	6 7	5910-00-156-7293	81349	M39003/01-2994 SE23XC02
2	8	5940-00-926-0015 5950-00-377-9882	81349 96906	MS75084-03
2	o 9	5950-00-377-9662	80063	SM-B-530007-1
2	9 10		07388	26350
2	10		81349	RBR54L106ROAM
2	12	5950-00-063-8418	97722	EP4716
2	13	5950-00-945-3757	97722	EP4774
2	14		49956	954185
2	15		24444	GZ71229A
2	16		81350	JANIN4973
2	17	5961-00-852-7549	81350	JAN1N754A
2	18		71034	BK5W
2	19		80063	SM-D-938515
2	20		98159	2829-75-2
2	21	5305-00-054-5649	96906	M551957-15
2	22	5310-00-782-1349	96906	MS15795-804
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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

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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		
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	29.573
nts	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	
Miles per Hour	Kilometers per Hour	1.609
TO CHANGE	το	MULTIPLY RY
TO CHANGE Centimeters	TO Inches	MULTIPLY BY
	Inches	0.394
Centimeters Meters.	Inches Feet	0.394 3.280
Centimeters Meters Meters.	Inches Feet Yards	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 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 Square Yards Square Miles	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 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
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 Kilometers Square Centimeters Square Meters 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 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 Square Centimeters Square Meters Square Meters Square Meters Square Kilometers 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	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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 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	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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	$\begin{array}{c} 0.394\\ 3.280\\ 1.094\\ 0.621\\ 0.155\\ 10.764\\ 1.196\\ 3.386\\ 2.471\\ 35.315\\ 1.308\\ 0.034\\ 2.113\\ 1.057\\ 0.264\\ 0.035\\ 2.205\\ 1.102\\ 0.738\\ \end{array}$
Centimeters . Meters . Meters . 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 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 Pounds per Square Inch	$\begin{array}{c} 0.394\\ 3.280\\ 1.094\\ 0.621\\ 0.155\\ 10.764\\ 1.196\\ 0.386\\ 2.471\\ 35.315\\ 1.308\\ 0.034\\ 2.113\\ 1.057\\ 0.264\\ 0.035\\ 2.205\\ 1.102\\ 0.738\\ 0.145\\ \end{array}$
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

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



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