

TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE REPAIR PARTS

AND SPECIAL TOOLS LISTS

FOR

TRANSMITTING SET,
RADAR DATA AN/AKT-18B

(NSN 5841-01-070-4408)

TECHNICAL MANUAL }
 No 11-5841-287-20 }

HEADQUARTERS
 MANUDEPARTMENT OF THE ARMY
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**ORGANIZATIONAL MAINTENANCE REPAIR PARTS
 AND SPECIAL TOOLS LIST**

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TRANSMITTING SET, RADAR DATA AN/AKT-18B

(NSN 5841-01-070-4408)

Current as of 10 October 1980

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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 and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703.

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

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**SECTION I
INTRODUCTION**

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 the AN/AKT-18B It authorizes the requisitioning and Issue of spares and repair parts as indicated by the source and maintenance 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 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:

Code	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.

(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:

Code	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
F -	The lowest maintenance level capable of complete repair of the support Item is the direct support level.
D -	The lowest maintenance level capable of complete repair of the support item is the depot level
Z -	Non reparable. 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	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. *Part Number.* 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 a stock numbered item is requisitioned, the repair part received may have a different part number than the part being replaced.

e. 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.

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.

4. Special Information

a. The following publications pertain to the AN/AKT-18B and its components:

- TM 11-5841-286-13, Radio Set AN/ARC-164(V)12
- TM 11-5841-286-20P, Radio Set AN/ARC-164(V)12
- TM 11-5841-287-12, Transmitting Set, Radar Data AN/AKT-18B.

b. The illustrations in this manual are identical to those published in TM 11-5841-287-30P. Only those parts assigned the third position SMR maintenance code "C" or "O" are listed in the tabular listing; therefore, there may be a break in the item number sequence. Only illustrations containing organizational authorized items appear in this manual.

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 alphanumeric 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)

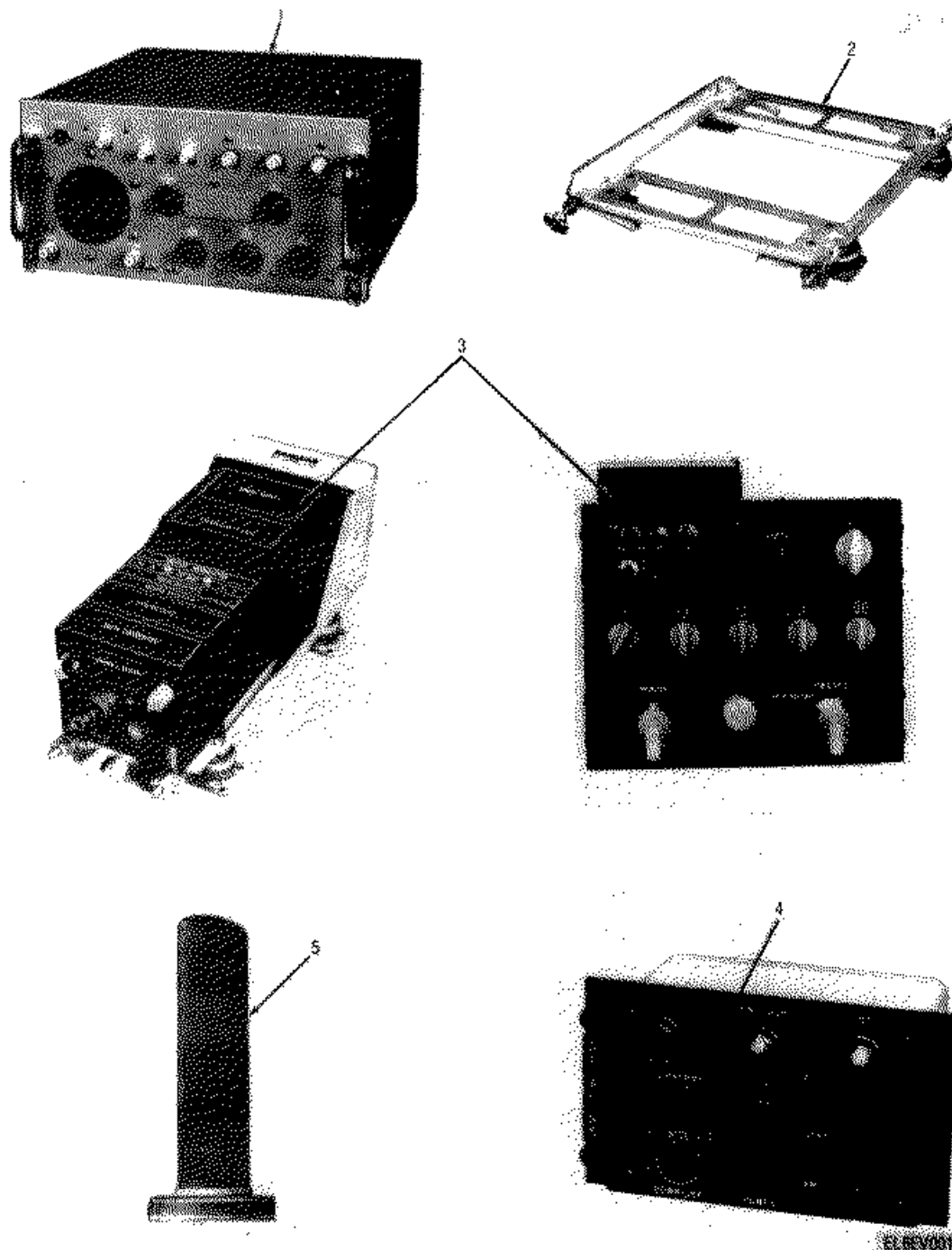


Figure 1. Transmitting Set, Radar Data AN/AKT-18B.

SECTION II

TM 11 -5841-287-20P

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 TRANSMITTING SET, RADAR DATA AN/AKT-18B		
1	1	PAODO	5841-01-073-9012	KY-865/AKT-18B	80058	ENCODER, VIDEK	EA	1
1	2	PAOFO	5841-01-070-4272	MT-6016/AKT-18B	80058	MOUNTING BASE,ELECT.....	EA	1
1	3	PDODD	5821-01-071-5624	AN/ARC-164(V)12	80058	RADIO SET REFER TO MANUAL TM 11-5841-286-20P	EA	1
1	4	PAODD	5841-01-073-9011	C-10546/AKT-18B	80058	CONTROL, DATA LINK	EA	1
1	5	PAOZZ	5985-00-545-6235	AT-450/ARC	80058	ANTENNA	EA	1

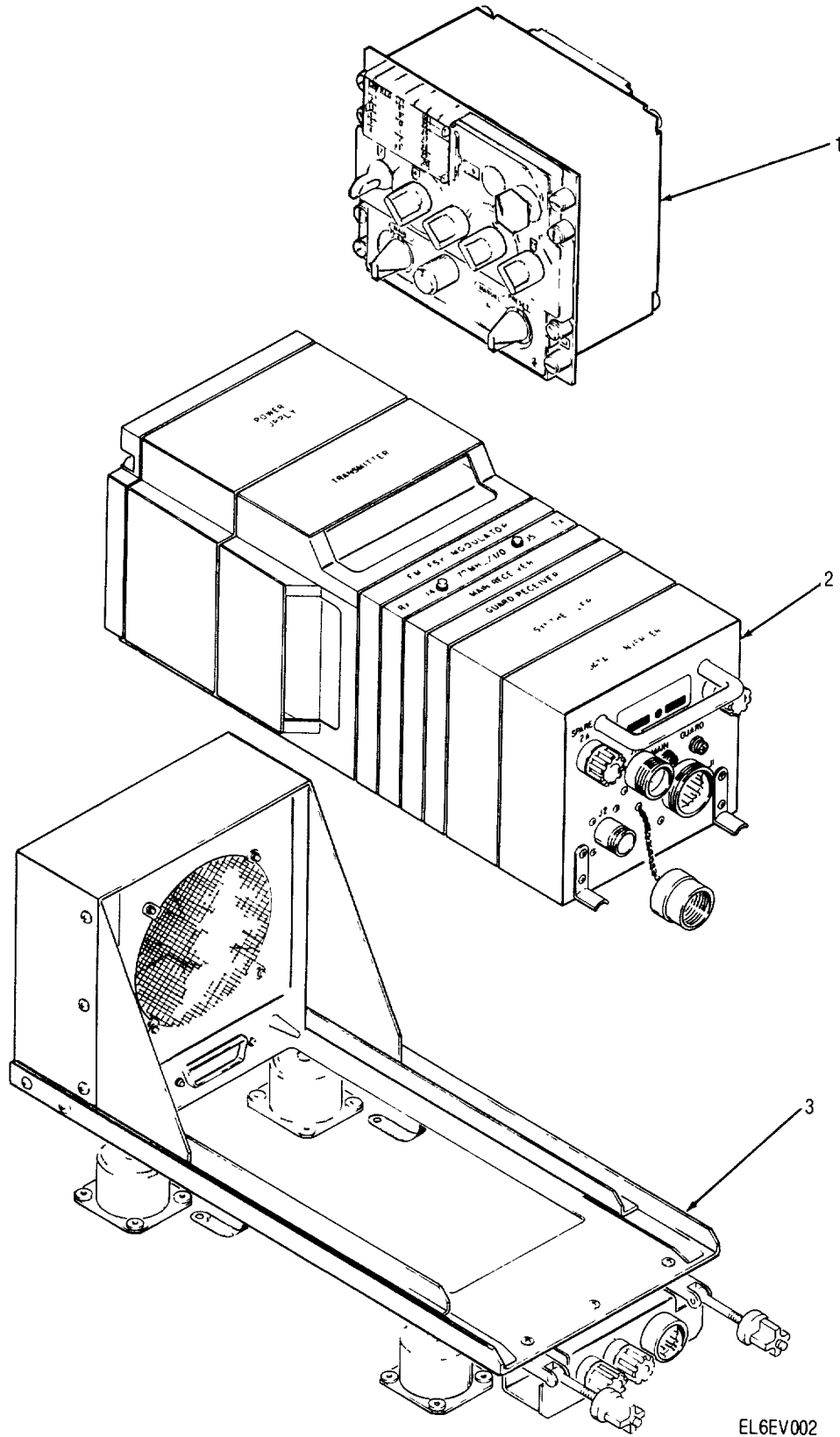


Figure 2. Radio Set AN/ARC-164(V)12.

SECTION II

TM 11-5841-287-20P

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
2	1	PAODD	5821-01-070-4433	C-10547/ARC-164 (V)12	80058	GROUP 01 RADIO SET AN/ARC-164(V)12 CONTROL,RADIO SET	EA	1
2	2	PAODD	5821-01-070-5844	RT-1288/ARC-164 (V)12	80058	RECEIVER-TRANSMITTER	EA	1
2	3	PAODD	5821-01-070-4271	MT-6017/ARC-164 (V)12	80058	MOUNTING BASE,ELECT	EA	1

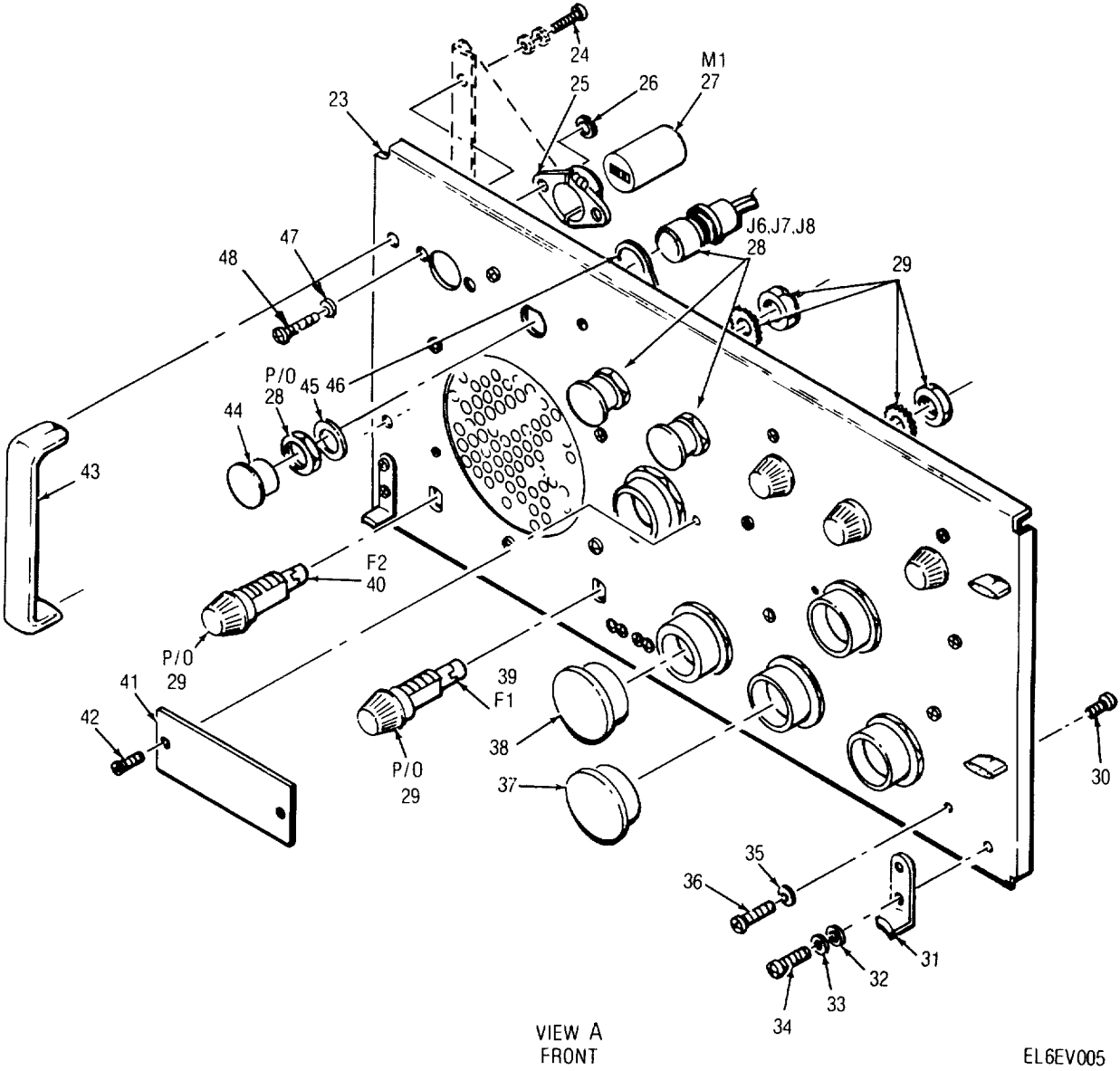


Figure 3. Video Encoder KY-865/AKT-18B

SECTION II

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(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
3	29	PAOZZ	5920-00-875-4100	FHN26G2	81349	GROUP 02 VIDEOENCODER KY-865/AKT-18B FUSEHOLDER, EXTRACTO	EA	2
3	39	PAOZZ	5920-00-280-8344	F02AZ50V1/2A	81349	FUSE,CARTRICGC.....	EA	1
3	40	PAOZZ	5920-00-284-6787	F02A250V5A	81349	FUSE. CARTRIOGE	EA	1

SECTION IV

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

TM 11-5841-287-20P

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5920-00-280-8344	3	39	5821-01-070-4433	2	1
5920-00-284-6787	3	40	5821-01-070-5844	2	2
5985-00-545-6235	1	5	5821-01-071-5624	1	3
5920-00-875-4100	3	29	5841-01-073-9011	1	4
5821-01-070-4271	2	3	5841-01-073-9012	1	1
5841-01-070-4272	1	2			

PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART. NUMBER	FSCM	FIG. NO.	ITEM NO.
AN/ARC-164(V)12	80058	1	3	F02A250V5A	81349	3	40
AT-450/ARC	80058	1	5	KY-865/AKT-18B	80058	1	1
C-10546/AKT-18B	80058	1	4	MT-6016/AKT-18B	80058	1	2
C-10547/ARC-164(V)12	80058	2	1	MT-6017/ARC-164(V)12	80058	2	3
FHN26G2	81349	3	29	RT-1288/ARC-164(V)12	80058	2	2
F02A250V1/2A	81349	3	39				

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BE EXACT PIN-POINT WHERE IT IS			
PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.
PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER		SIGN HERE	

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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