

TM 11-6130-227-40P-1

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**TECHNICAL MANUAL**

**GENERAL SUPPORT MAINTENANCE  
REPAIR PARTS AND SPECIAL TOOLS LIST  
(INCLUDING DEPOT MAINTENANCE REPAIR PARTS  
AND SPECIAL TOOLS)**

**FOR**

**CHARGER, BATTERY  
PP-1660A/G**

**A N D**

**PP-1660B/G  
(NSN 6130-00-669-6659)**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**  
**1 JUNE 1983**

TECHNICAL MANUAL }  
No. 11-6130-227-40P-1 }

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, DC, 1 June 1983

GENERAL SUPPORT MAINTENANCE  
REPAIR PARTS AND SPECIAL TOOLS LIST  
(INCLUDING DEPOT MAINTENANCE REPAIR PARTS  
AND SPECIAL TOOLS)  
**FOR**  
**CHARGER, BATTERY PP-1660A/G, PP-1660B/G**  
**(NSN 6130-00-669-6659)**

Current as of 17 January 1983

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 the back of this manual direct to Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, NJ 07703.

In either case, a reply will be 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 general support maintenance of the PP-1660A/G and PP-1060B/G. 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 alphanumeric 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. Illustrations.* 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.

XB - Item is not procured or stocked. If not available through salvage, requisition.

#### 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:

#### Code

#### Application/Explanation

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

H-Support item is removed, replaced, used at the general support 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

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

#### Code

#### Definition

Z- Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.

*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 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.

*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.* 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	Used on
CSH	PP-1660A/G
FCT	PP-1660B/G

*b.* The following publications pertain to the PP-1660A/G and PP-1660B/G and its components:  
TM 11-6130-227-12, Charger, Battery PP-1660/G and PP-1660A/G.

TM 11-6130-227-20P, Charger, Battery PP-1660/G.

TM 11-6130-227-20P-1, Charger, Battery PP-1660A/G.

TM 11-6130-227-40, Charger, Battery PP-1660/G and PP-1660A/G.

*c.* 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: DRSEL-MM, Fort Monmouth, NJ 07703 for the part required to support your equipment.

#### 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.

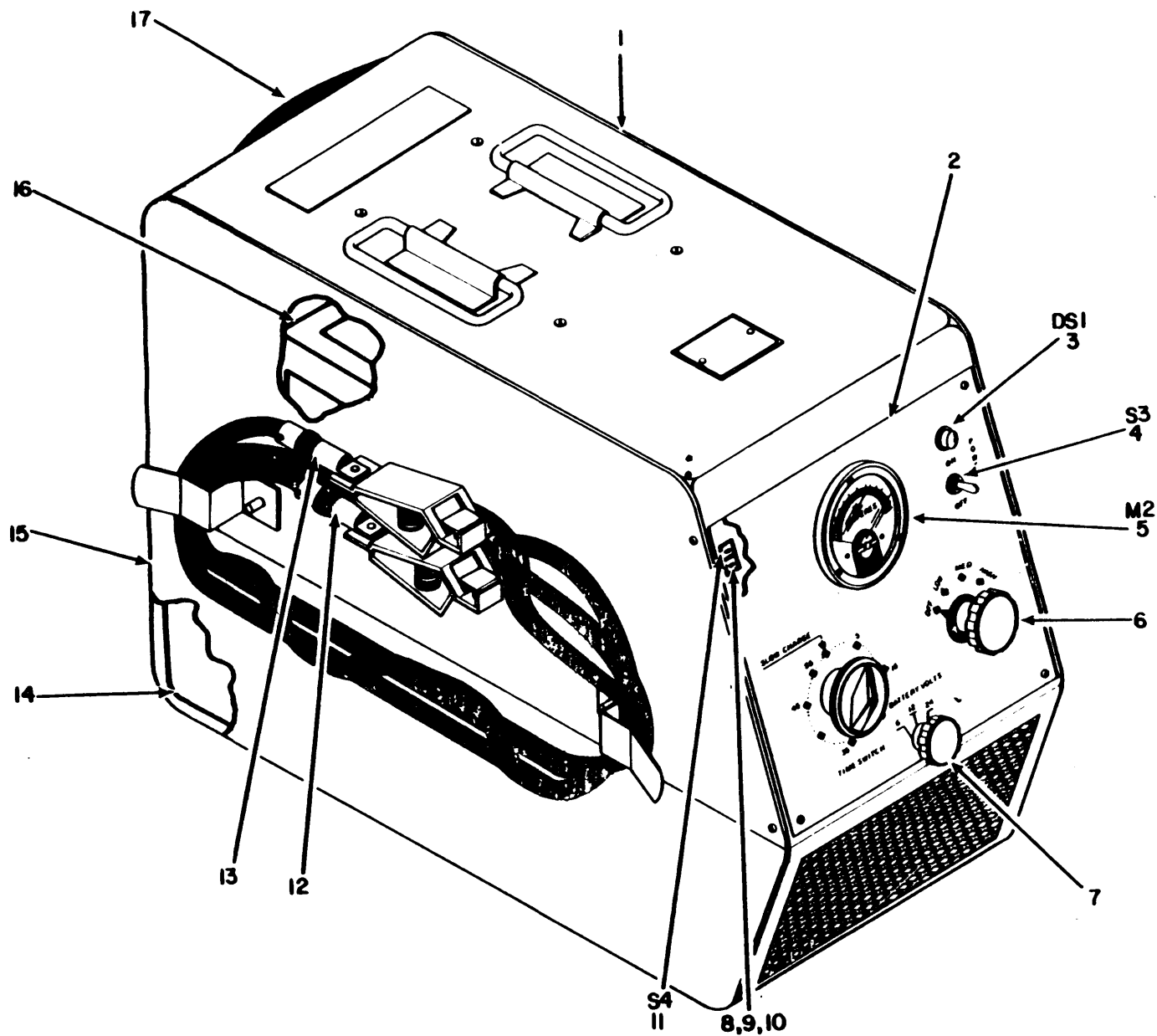
(1) *First.* Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.

(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)



ELOTE006

Figure 1. Charger, Battery PP-1660A/G, PP-1660B/G (Sheet 1 of 2).

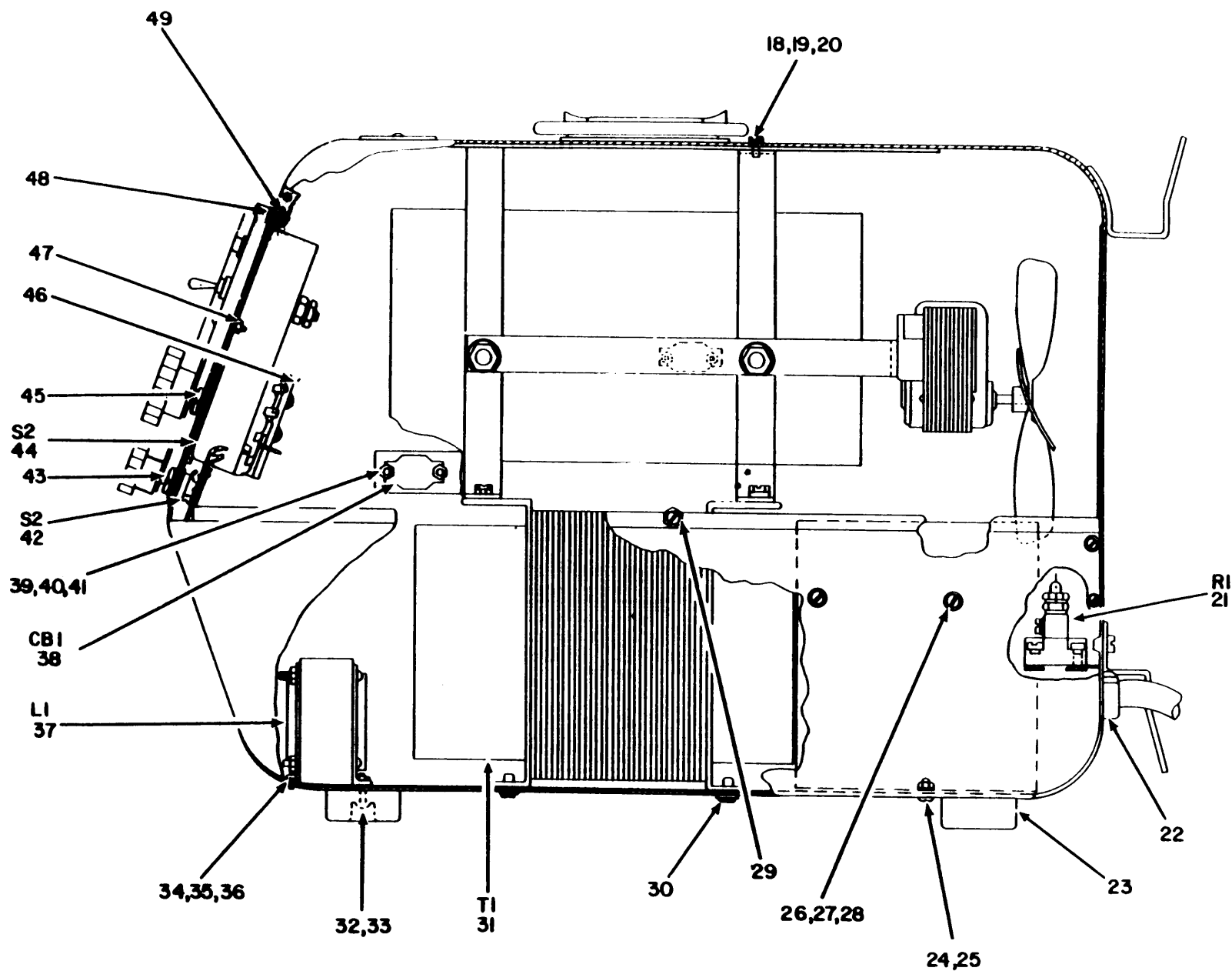


Figure 1. Charger, Battery PP-1660A/G, PP-1660B/G (Sheet 2 of 2).

ELOTE007

SECTION II		(2)	(3)	(4)	(5)	(6)			(7)	(8)
ILLUSTRATION						DESCRIPTION				QTY
(a)	(b)		NATIONAL		PART					INC
FIG	ITEM	SMR	STOCK		NUMBER		USABLE	ON CODE	U/M	IN
NO	NO	CODE	NUMBER	FSCM						UNIT
GROUP 00 CHARGER, BATTERY PP-1660B/G										
1	1	PAHZZ		80063	SM-0-292720	CASE,COVER ASSEMBLY			EA	1
1	2	XBHZZ		80063	SM-C-884026	PLATE,CRONTOL PANEL			EA	1
1	3	PAHZZ		75915	980-670A-96WGN	LIGHT,INDICATOR	FCI		EA	1
1	4	PAHZZ	5930-00-655-1575	96906	MS35059-22	SWITCH,TOGGLE	FCT		EA	1
1	5	PAHZZ		52512	280041	AMMETER			EA	1
1	6	PAOZZ		52512	280062	KNOB,POINTER	CSH		EA	2
1	7	PAOZZ		52512	280051	KNOB,POINTER	CSM		EA	1
1	7	PAOZZ		72512	4100-Q	KNOB,POINTER	FCT		EA	1
1	8	PAHZZ	5305-00-954-3938	12745	23728-1-65	SCREW,MACHINE	FCT		EA	2
1	9	PAHZZ	5310-00-934-9738	96906	MS35649-222	NUT,PLAIN,HEXAGON	FCT		EA	2
1	10	PAHZZ	5310-00-820-6653	96906	MS35338-50	WASHER,LOCK	FCT		EA	2
1	11	PAHZZ	5930-00-544-5522	01963	E61-00K	SWITCH,SENSITIVE	FCT		EA	1
1	12	PAHZZ		80063	SM-D-357331	BGATRY LEAD ASY-BLK			EA	1
1	13	PAHZZ		80063	SM-D-357330	BATRY LEAD ASSY-RED			EA	1
1	14	PAHZZ		80063	SM-C-357310	RELAY ASSEMBLY			EA	1
1	15	PAHZZ		80063	SM-D-884029	CASE,BASE ASSEMBLY			EA	1
1	16	PAHZZ		80063	SM-D-884023	RECTIFIER ASSEMBLY	CSM		EA	1
1	16	PAHZZ		15309	A-3000	RECTIFIER ASSEMBLY	FCT		EA	1
1	17	PAHZZ		80063	SM-D-357325	LEAD ASSEMBLY,POWER			EA	1
1	18	PAHZZ	5305-00-984-6191	96906	MS-35206-243	SCREW,MACHINE	FCT		EA	12
1	19	PAHZZ	5310-00-809-8544	96906	MS-27183-7	WASHER,FLAT	FCT		EA	12
1	20	PAHZZ	5310-00-045-3299	74006	2151-108	WASHER,LOCK	FCT		EA	12
1	21	PAHZZ		52512	280211	SHUNT			EA	1
1	22	PAHZZ		80063	SM-8-357323	BUSHING,STRAIN RELI			EA	3
1	23	PAHZZ		80063	SM-8-357341	BUMPER,RUBBER			EA	4
1	24	PAHZZ	5305-00-984-6192	96906	MS35206-244	SCREW,MACHINE			EA	2
1	25	PAHZZ	5310-00-809-8544	96906	MS27183-7	WASHER,FLAT			EA	4
1	26	PAHZZ	5305-00-984-6191	96906	MS35206-243	SCREW,MACHINE			EA	4
1	27	PAHZZ	5310-00-596-7693	88044	AN93688	WASHER,LOCK			EA	6
1	28	PAHZZ		96906	MS35649-82	NUT,PLAIN,HEXAGON			EA	6
1	29	PAHZZ		77900	1108-61-50	SCREW,LOCK WASHER	CSH		EA	2
1	30	PAHZZ		78189	1110-61-50	SCREW,ASSEMBLED WAS	CSH		EA	12
1	31	PAHZZ		52512	280191	TRANSFORMER,POWER			EA	1
1	32	PAHZZ	5305-00-969-7435	96906	MS35207-264	SCREW,MACHINE			EA	6
1	33	PAHZZ	5316-00-045-3296	96906	MS35338-43	WASHER,LOCK			EA	4
1	34	PAHZZ	5305-00-990-6444	96906	MS35207-261	SCREW,MACHINE	FCT		EA	4
1	35	PAHZZ	5310-00-596-7691	96906	MS35335-32	WASHER,LOCK	CSM		EA	2
1	35	PAHZZ	5310-00-596-7691	96906	MS35335-32	WASHER,LOCK	FCT		EA	4
1	36	PAHZZ	5310-00-934-9751	96906	MS35650-302	NUT,PLAIN,HEXAGON			EA	6

SECTION II  
(1)  
ILLUSTRATION

(a) FIG NO	(b) ITEM NO	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) FSCM	(5) PART NUMBER	(6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
1	37	PAHZZ	5950-00-888-7293	52512	280201	REACTOR	CSH	EA	1
1	37	PAHZZ		15309	A-2001	REACTOR	FCT	EA	1
1	38	PAHZZ	5930-00-889-7582	80063	SM-8-357315	CIRCUIT BREAKER	CSH	EA	1
1	39	PAHZZ	5305-00-984-4988	96906	MS35206-25	SCREW, MACHINE	CSH	EA	2
1	40	PAHZZ	5310-00-209-0788	96906	MS35335-30	WASHER, LOCK	CSH	EA	2
1	41	PAHZZ	5310-00-013-4530	96906	MS35649-62	NUT, PLAIN HEXAGON	CSH	EA	2
1	42	PAHZZ	5930-00-626-0375	25244	1472	SWITCH, ROTARY		EA	1
1	43	PAHZZ	5310-00-159-6321	96906	MS25082-20	NUT, PLAIN, HEXAGON		EA	3
1	44	PAHZZ	5930-00-889-7582	80063	SM-8-357345	SWITCH, ROTARY		EA	1
1	45	PAHZZ	5310-00-595-7237	96906	MS35333-42	WASHER, LOCK		EA	1
1	46	PAHZZ		52512	280031	TIMER, INTERNAL		EA	1
1	47	PAHZZ	5310-00-187-2413	88044	AN961-616	WASHER, FLAT		EA	3
1	48	PAHZZ		96906	MS24637-1	SCREW, SELF TAPPING		EA	4
1	49	PAHZZ	5305-00-969-6914	96906	MS24617-10	SCREW, TAPPING, THREA	CSM	EA	10
1	49	PAHZZ	5305-00-969-6914	96906	MS24617-10	SCREW, TAPPING, THREA	FCT	EA	12



## NATIONAL STOCK NUMBER AND PART NUMBER INDEX

STOCK NUMBER		FIGURE NO.	ITEM NO.	STOCK NUMBER		FIGURE NO.	ITEM NO.
5310-00-013-4530		1	41	5310-00-820-6653		1	10
5310-00-045-3596		1	33	5950-00-888-7293		1	37
5310-00-045-3299		1	20	5930-00-889-7582		1	38
5310-00-159-6321		1	43	5930-00-889-7582		1	44
5310-00-187-2413		1	47	5310-00-934-9738		1	9
5310-00-209-0788		1	40	5310-00-934-9751		1	36
5930-00-544-5522		1	11	5305-00-954-3938		1	8
5310-00-595-7237		1	45	5305-00-969-6914		1	49
5310-00-596-7691		1	35	5305-00-969-6914		1	49
5310-00-596-7691		1	35	5305-00-984-4988		1	39
5310-00-596-7693		1	27	5305-00-984-6191		1	18
5930-00-626-0375		1	42	5305-00-984-6191		1	26
5930-00-655-1575		1	4	5305-00-984-6192		1	24
5310-00-809-8544		1	19	5305-00-989-7435		1	32
5310-00-809-8544		1	25	5305-00-990-6444		1	34
FSCM	PART NUMBER	FIGURE NO.	ITEM NO.	FSCM	PART NUMBER	FIGURE NO.	ITEM NO.
15309	A-2001	1	37	80063	SM-B-357315	1	38
15309	A-3000	1	16	80063	SM-B-357323	1	22
88044	AN9368	1	27	80063	SM-B-357341	1	23
88044	AN961-616	1	47	80063	SM-B-357345	1	44
01963	E61-00K	1	11	80063	SM-C-357310	1	14
96906	MS727183-7	1	19	80063	SM-C-B84026	1	2
96906	MS-35206-243	1	18	80063	SM-D-292720	1	1
96906	MS24617-10	1	49	80063	SM-D-357325	1	17
96906	MS24617-10	1	49	80063	SM-D-357330	1	13
96906	MS2463771	1	48	80063	SM-D-357331	1	12
96906	MS25082-20	1	43	80063	SM-D-884023	1	16
96906	MS27183-7		25	80063	SM-D-884029	1	15
96906	MS35059-22	1	4	77900	1108-61-50	1	29
96906	MS35206-243	1	26	78189	1110-61-50	1	30
96906	MS35206-244	1	24	25244	1472	1	42
96906	MS35206-25	1	39	74006	2151-108	1	20
96906	MS35207-261	1	34	12745	23728-1-65	1	8
96906	MS35207-264	1	32	52512	280031	1	46
96906	MS35333-42	1	45	52512	280041	1	5
96906	MS35335-30	1	40	52512	280051	1	7
96906	MS35335-32	1	35	52512	280062	1	6
96906	MS35335-32	1	35	52512	280191	1	31
96906	MS35338-43	1	33	52512	280201	1	37
96906	MS35338-50	1	10	52512	280211	1	21
96906	MS35649-222	1	9	72512	4100-Q	1	7
96906	MS35649-62	1	41	72512	4102-BD	1	6
96906	MS35649-82	1	28	75915	980-670A-96WGN	1	3
96906	MS35650-302	1	36				

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PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
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33

44

19

45

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

For item 2, change the NSN to read: 5835-00-134-9186.  
Reason: Accuracy.

Identify the cover on the junction box (item no. 5).  
Reason: It is a separate item and is not called out  
on figure 19.

Add the cover of the junction box as an item in the  
listing for figure 19.

Reason: Same as above

SAMPLE

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PUBLICATION DATE  
1 JUN 83

PUBLICATION TITLE Charger, Battery  
PP-16COA/G and PP-1660B/G

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PAGE NO.	PARA- GRAPH	FIGURE NO.	TABLE NO.
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TEAR ALONG PERFORATED LINE

## THE METRIC SYSTEM AND EQUIVALENTS

### LENGTH MEASURE

1 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

### WEIGHTS

1 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

### 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

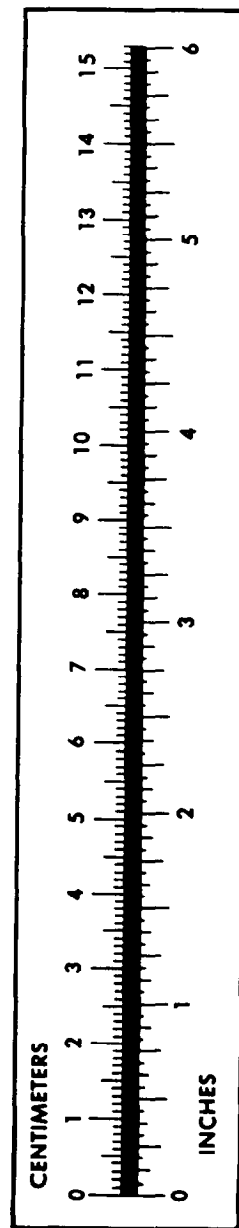
### TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$   
 212° Fahrenheit is equivalent to 100° Celsius  
 90° Fahrenheit is equivalent to 32.2° Celsius  
 32° Fahrenheit is equivalent to 0° Celsius  
 $9/5^{\circ}\text{C} + 32 = ^{\circ}\text{F}$

### APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	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	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
Quarts	Liters	0.947
Gallons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
Liters	Gallons	0.264
Milligrams	Ounces	0.035
Grams	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
Kilometers per Liter	Miles per Gallon	2.354
Kilometers per Hour	Miles per Hour	0.621





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