

## Repair Parts List Instructions

**Repair Parts List.** This chapter provides a list of spares and repair parts required to maintain and support this equipment. They authorize the requisitioning and issue of spares and repair parts as indicated by the source, maintenance, and recoverability (SMR) code. The pages list spares and repair parts authorized for use in the performance of maintenance. The list also includes parts, which must be removed for replacement of authorized parts. Parts lists are composed of functional groups in alpha sequence, with parts in each group listed in Figure and Number sequence. This listing comprises the main part of the Repair Parts Listing. It consists of an illustration followed by a listing of assemblies or components. It is arranged in columns, which show stock numbers, item identification, and other data necessary to maintain this equipment in an operative condition. Illustrations are placed either before, or in close proximity to, the component or assembly. The items are arranged in disassembly sequence.

a. Illustration (Column 1). This column is divided as follows:

- (1) Figure Number. Indicates the figure number of the illustration in which the item is shown.
- (2) Item Number. The number used to identify the item called out in the illustration.

c. Source Maintenance Recoverability Code (Column 2). This column contains a series of alphabetic letters, which denote the uniform source, maintenance and recoverability coding structure. This Code is assigned to items subordinate to or associated with an end item, i.e., spares, repair parts and support equipment. The uniform code format is composed of three parts consisting of a two (2) position Source Code, a two (2) position Maintenance Code, and a one (1) position Recoverability Code.

(1) The code provides the user with information on each item relative to (1) the method of obtaining the item; for example, by requisition, fabrication or salvage; (2) the lowest maintenance echelon authorized to remove, replace and use the item and the lowest echelon capable to perform complete repair; and (3) disposition action on unserviceable items.

(2) Sample SMR codes are:

(1) Source	(2) Maintenance		(3) Recoverability
	Use	Repair	
PA	F	F	A
PB	F	H	H
PC	O	Z	Z
AF	F	Z	Z

MF	F	F	F
KF	H	Z	Z
XA	F	Z	Z
XB	O	F	F
XC	H	Z	Z

**DEFINITIONS AND APPLICATION OF SOURCE, MAINTENANCE, and RECOVERABILITY CODES**

**SOURCE CODES**

Code                      Application/Explanation

Source codes are assigned to support items and indicate the manner of acquiring the Items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second position of the uniform SMR code format.

**SERIES A: ASSEMBLE, COMPLETE ASSEMBLY NOT STOCKED**

Code "A" entered in the first position of the source code applies to items that are not procured as assemblies but are assembled within the Marine Corps prior to installation. The code entered in the second position designates the lowest echelon authorized to assemble the item. All the parts used in the assembly will be "P" coded.

- AO    Item to be assembled at organizational level 2nd echelon.
- AF    Item to be assembled at intermediate maintenance levels 3rd echelon.
- AH    Item to be assembled at intermediate maintenance levels 4th echelon.
- AD    Item to be assembled at depot maintenance levels 5th echelon.

**SERIES K: ITEMS OF A KIT, NOT PURCHASED SEPARATELY**

- KD    An item of depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
- KF    An item of maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at organizational or intermediate levels of maintenance.
- KB    Items included in both a depot overhaul/repair kit and a maintenance kit.

## **SERIES M: MANUFACTURE, PARTS NOT PROCURED**

Code "M" entered in the first position of the source code applies to items that are not procured but are capable of being fabricated or manufactured within the Marine Corps. These items have relatively low usage and will generally be fabricated or manufactured only as required for immediate repair or replacement. The code entered in the second position designates the lowest

echelon authorized to manufacture or fabricate the item. Units will requisition the bulk materiel under the NSNs and the quantities indicated to effect the fabrication or manufacture of the item.

- MO Item to be manufactured or fabricated at organizational level, 2nd echelon.
- MF Item to be manufactured or fabricated at intermediate maintenance levels, 3rd echelon.
- MH Item to be manufactured or fabricated at intermediate maintenance levels, 4th echelon.
- MD Item to be manufactured or fabricated at depot maintenance level, 5th echelon.

## **SERIES P: PARTS PROCURED, SUPPLY SYSTEM STOCK**

- PA Item procured and stocked for anticipated or known usage.
- PB Item procured and stocked for insurance purposes because essentiality dictates that a minimum quantity be available in the supply systems.
- PC Item procured and stocked and which otherwise would be code PA except that it is deteriorative in nature.
- PD Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfitting. Not subject to automatic replenishment.
- PE Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
- PF Support equipment which will not be stocked but which will be centrally procured on demand.
- PG Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment, which because of probable discontinuance or shutdown of production facilities would prove uneconomical to reproduce at a later time.



a. **USE (Third Position):** 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.

- O Organizational. 1st and 2nd echelon
- F Field. 3rd echelon
- H Field. 4th echelon
- L Item is removed, replaced, used at designated specialize Repair activity.
- D Depot. 5th echelon
- Z Item is not authorized to be removed or replaced at any maintenance level. This code assigned to items not required for support in a specific application, and is identified for reference purposes only.

b. **REPAIR (Fourth Position):** 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. The decision to code the support item for repair at the indicated maintenance levels requires that all maintenance capability (remove, replace, repair, assemble and test) for the support items be provided to that level. This does not preclude some minor repair, which should be accomplished at a lower level of maintenance unless specifically excluded by the appropriate code (i.e., L).

- O Organizational. 1st and 2nd echelon
- F Field. 3rd echelon
- H Field. 4th echelon
- K Repairable item. Repair, condemnation, and disposal to be performed at contractor facility.
- D Depot. 5th echelon
- L Repair restricted to designated Specialized Repair Activity.
- Z Non-repairable. No repair is authorized.

- B No repair is authorized. The item may be reconditioned by adjusting, lubricating, etc., at the user level. No parts or special tools are procured for the maintenance of this item.

## RECOVERABILITY CODES

<u>Code</u>	<u>Application/Explanation</u>
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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.

- |   |  |
|---|--|
| Z | Non-reparable item. When unserviceable, condemn and dispose of at the level indicated in position 3.   |
| O | Reparable item. When uneconomically repairable, condemn and dispose of at organizational level.  |
| F | Reparable item. When uneconomically repairable, condemn and dispose of at field maintenance level 3rd echelon.   |
| H | Reparable item. When uneconomically repairable, condemn and dispose of at field maintenance level 4th echelon.   |
| D | Reparable item. When beyond lower level of repair capability, return to depot. Condemnation and disposal not authorized below depot level.   |
| L | Reparable item. Repair, condemnation and disposal not authorized below depot level.  |
| A | Item requires special handling or condemnation procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material). Refer to appropriate manuals/directives for specific instructions. |

d. Stock Number (Column 3). This column furnishes National Stock Numbers (NSNs) assigned to those centrally managed items required for the support of the equipment. When they have been assigned, NSNs will be used in all supply operations, from original purchase to final disposal of the item. Absence of an NSN indicates the item is not normally stocked as a repair part, as indicated by the source code portion of the SMR codes. If an item without an NSN is required, it should be determined if the item can be obtained from assembly, manufacturer or salvage by referring to the source code. Items not stock numbered, that cannot be obtained from these sources, may be requisitioned using the CAGE code, part number and referencing the technical manual number, date of the technical manual, Figure and item number and the page number, which applies.

e. Commercial and Government Entity (CAGE) (Column 4). The CAGE codes are five position codes assigned to the manufacturers/non-manufacturers organizational entities/contractors. The CAGE code is used in conjunction with the firm's reference number relating the firm with the item of supply, production or design in cataloging and other supply record, as well as on engineering documentation. The codes are essential to contract/purchase agreements and various activities/agencies automated data processing (ADP) systems. The CAGE code and reference number are used to screen item identifications against each other primarily to detect duplication.

f. Part Number (Column 5). 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 National stock Number (NSN) item is requisitioned, the item received may have a different part number than the part being replaced.

g. Description (Column 6). Indicates the Federal item name and, if required, a minimum description to identify the items. Items that are included in kits and sets are listed below the name of the kit or set with the quantity of each item in the kit or set indicated in the quantity incorporated in column. When the part used differs between serial numbers of the same model, the effective serial numbers are shown as the last line of the description.

h. Replace (Column 7). This column is divided as follows:

- (1) ECO column indicates items that have been determined to be economically cheaper to replace during repair than to expend the man-hours necessary to fully inspect each item.
- (2) MAN column indicates items that must be replaced any time they are loosened or removed.

No X in either column indicates the item has special inspection procedures or this item is further disassembled and a subsequent page will cover the components.

i. Unit of Measure (U/M) (Column 8). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. The measure is expressed by two-character alphabetical abbreviation (e.g., ea, in, pr, etc.). When the unit of measure differs from unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

j. Quantity Incorporated in Unit (Column 9). Indicates the quantity of the item used in the breakdown shown on the illustration figure, which is prepared for a functional group,

subfunctional group, or an assembly. An "AR" appearing in the column in lieu of quantity is applicable (e.g., shims, spacers, etc.).

k. Special Information. Circled key callouts on the Repair Parts Illustration figures are to indicate items that must be replaced during repair of an item in order to return that item to 100% functionality and 90% service life according to repair standard requirement.

l. National Stock Number Index. A list, in National Stock Number (NSN) sequence is contained in this index. National Stock Numbers, Part Numbers CAGE codes are cross-referenced to each illustration figure and item number appearance.

m. Part Number Index. A list, in Part Number sequence is contained in this index. Part Numbers, CAGE codes and National Stock Numbers are cross-referenced to each illustration figure and item number appearance.

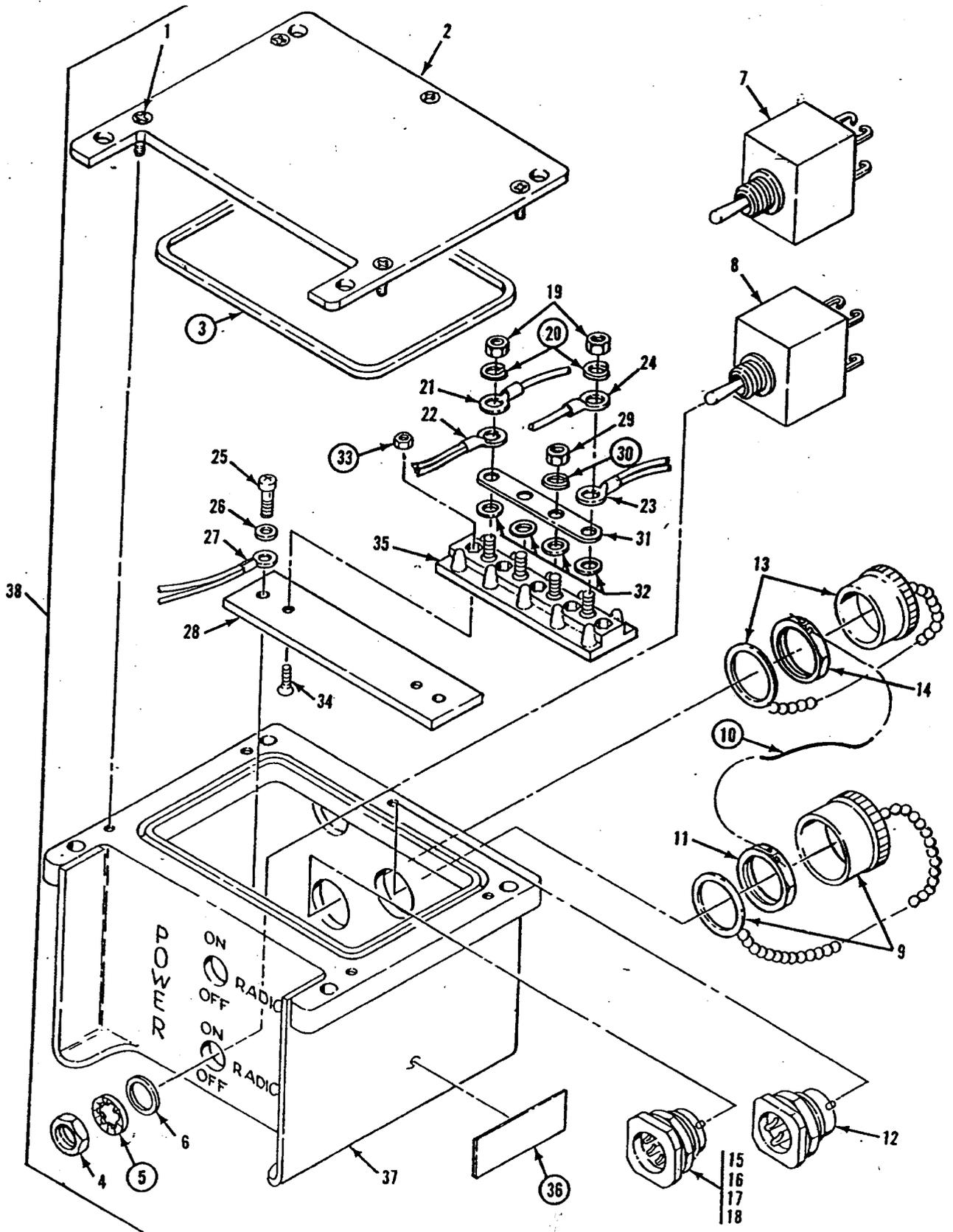


Figure 6-2. Power Control Unit — Disassemblv.

ILLUS		SMR	NSN	CAGE	PART NUMBER	DESCRIPTION	REPL			QTY INC IN UNIT
FIG NO	ITEM NO						E C O	M A N	U / M	
<b>GROUP EYD POWER CONTROL UNIT 648-5155-001</b>										
6-2	1	PAFZZ	5305-01-148-8209	08524	DPY7900-8-8-2	Captive screw	X		EA	5
6-2	2	PAFZZ	6190-01-118-2056	80664	2618642-1	Cover, power supply		X	EA	1
6-2	3	PAFZZ	5330-01-127-2465	80064	2618753	Gasket	X		EA	1
6-2	4					Nut (parts of items 7, & 8)	X	X	EA	2
6-2	5					Lockwasher (parts of items 7, & 8)	X	X	EA	2
6-2	6	PAFZZ	5310-00-167-0837	88044	AN960-616L	Washer	X		EA	2
6-2	7	PAFZZ	5962-01-118-0315	80064	2618734	Circ breaker CB-B	X		EA	1
6-2	8	PAFZZ	5962-01-118-0315	80064	2618734	Circ breaker CB-A	X		EA	1
6-2	9	PAFZZ	5935-01-148-7860	13499	371-8487-030	Cover, electrical	X		EA	1
6-2	10	PAFZZ	9506-00-293-4208	96906	MS20995C32	Lockwire		X	FT	AR
6-2	11					Nut (part of item 12)	X		EA	1
6-2	12	PAFZZ	5935-01-133-6637	77820	PT07A18-11P(014)	Connector J1			EA	1
6-2	13	PAFZZ	5935-00-809-0389	77820	10-101964-14S5	Cover, electrical	X		EA	4
6-2	14					Nut (parts of items 15,16,17, & 18)	X		EA	4
6-2	15	PAFZZ	5935-01-133-6636	77820	PT07A14-5S(014)	Connector J2	X		EA	1
6-2	16	PAFZZ	5935-01-133-6636	77820	PT07A14-5S(014)	Connector J3	X		EA	1
6-2	17	PAFZZ	5935-01-133-6636	77820	PT07A14-5S(014)	Connector J4	X		EA	1
6-2	18	PAFZZ	5935-01-133-6636	77820	PT07A14-5S(014)	Connector J5	X		EA	1
6-2	19	PAFZZ	5310-00-934-9765	96906	MS35650-304	Nut	X		EA	2
6-2	20	PAFZZ	5310-00-869-9576	96906	MS35338-157	Lockwasher		X	EA	2
6-2	21	PAFZZ	5940-00-143-4780	96906	MS25036-108	Lead W02/W03	X		EA	1
6-2	22	PAFZZ	5940-00-143-4794	96906	MS25036-112	Lead W12	X		EA	1
6-2	23	PAFZZ	5940-00-143-4794	96906	MS25036-112	Lead W13/W15	X		EA	1
6-2	24	PAFZZ	5940-00-143-4780	96906	MS25036-108	Lead W14	X		EA	1
6-2	25	PAFZZ	5305-00-054-5648	96906	MS51957-14	Screw	X		EA	2
6-2	26	PAFZZ	5310-00-595-6211	96906	MS15795-803	Washer, flat	X		EA	2
6-2	27	PAFZZ	5940-00-204-8990	96906	MS25036-111	Lead W04/W05	X		EA	1
6-2	28	XBFZZ		80064	2618665-1	Plate	X		EA	1
6-2	29	PAFZZ	5310-00-934-9765	96906	MS35650-304	Nut	X		EA	2
6-2	30	PAFZZ	5310-00-869-9576	96906	MS35338-157	Lockwasher		X	EA	2
6-2	31	PAFZZ	6150-00-557-7654	96906	MS25226-4-4	Bus	X		EA	1
6-2	32					Washer (part of item 35)	X		EA	4
6-2	33	PAFZZ	5310-00-982-5667	96906	MS21044C04	Self locking nut		X	EA	2
6-2	34	PAFZZ	5305-00-770-2580	96906	MS51959-16	Screw	X		EA	2
6-2	35	PAFZZ	5940-00-243-7735	96906	MS27212-2-4	Terminal board TB1	X		EA	1
6-2	36	XBFZZ		80064	2618786-1	Data plate		X	EA	1
6-2	37	PAFZZ	5895-01-124-3271	80064	2618639-1	Housing			EA	1
6-2	38	PBFHH	5895-01-122-3452	13499	648-5155-001	Power control unit			EA	1