

SECTION 1. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

1-1. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

a. The call for stringent application of PMCS procedures is issued throughout the Army Medical Department (AMEDD). Your vigilance is needed in following the required procedures in maintaining medical equipment. Medical equipment must be inspected and serviced systematically and periodically to ensure that it is ready for operation at all times. Inspection will reveal defects that can be corrected before they result in serious damage or failure.

b. Medical equipment will be maintained to 10/20 standards as published in equipment technical manuals (TMs) or to the operational standards published in the manufacturer's operator or service literature. In the absence of a TM, the standards established in Appendix A and Appendix B of this Supply Bulletin, in conjunction with the requirements of the manufacturer's literature, will be used.

c. Complete PMCS will be performed before placing Army equipment in administrative storage. When equipment is removed from storage, perform PMCS to ensure its operational readiness. Results of the equipment inspection will be documented on DA Form 2404, *Equipment Inspection and Maintenance Worksheet*. All discrepancies will be annotated with corrective action required and steps taken to correct the deficiency.

d. This *SB 8-75-S8* is used to update 10/20 standards for medical equipment and will include additional standards for reportable items and newly fielded medical equipment. Each new publication of *SB 8-75-S8* supersedes the previous year's edition. Equipment specific 10/20 PMCS and Maintenance Allocation Chart (MAC) updates will also be available through the Maintenance Directorate website at **www.usamma.army.mil/maintenance**. The 10/20 PMCS and MAC update is an ongoing project. New releases will be posted as they are developed.

e. *SB 8-75-S8* will be used when discrepancies are encountered with the 10/20 standards published in the equipment's TM. Standards published in the manufacturer's literature will take precedence over *SB 8-75-S8*.

1-2. OPERATOR LEVEL PMCS

a. Appendix A contains a list of tasks to be performed by unit level operator/user personnel. These PMCS tables are also referred to as "10 PMCS" requirements. Preventive maintenance by operator/user personnel is not limited to performing the checks and services listed in the tables. There are tasks the operator/user must do any time the equipment is used or stored, such as checking for general cleanliness, observing for improper operational indicators, and maintaining the proper quantities of operating supplies.

b. The following is a list of PMCS table column headings with a description of the information found in each column:

(1) Item Number. This column shows the sequence in which to do the PMCS, and is used to identify the equipment area on the DA Form 2404.

(2) Interval. This column shows when each PMCS item is to be serviced. B, D, and A should be performed with daily use of the equipment.

B – Before Operation	D – During Operation
A – After Operation	Q – Quarterly
S – Semiannually	

(3) Item to be Inspected and Procedure. This column identifies the general area or specific part to be checked or serviced.

(4) Equipment is not Mission Capable If. This column lists conditions that make the equipment unavailable or unusable.

c. When the equipment must be kept in continuous operation, check and service only those items that will not disrupt operation. Perform the complete daily checks and services when the equipment can be shut down.

d. Operator/user personnel will report problems with medical equipment discovered during their “10 PMCS” that they are unable to correct. Refer to TB 38-750-2, *Maintenance Management Procedures for Medical Equipment*, and report the deficiency using the proper forms. Consult with your unit’s Medical Equipment Repairer if you need assistance.

e. Table 1-1 lists the “10 PMCS” standards located in Appendix A.

TABLE 1-1. 10 PMCS STANDARDS LOCATED IN APPENDIX A

NSN	EQUIPMENT NAME AND MODEL	PAGE
N/A	Generic Operator Standards	A-1
4110-01-117-3902	Refrigerator, Mechanical, Blood Bank, BBR37-SS-1B-01	A-2
4110-01-159-6922	Refrigerator, Mechanical, Blood Bank, 139875	A-4
4110-01-287-7111	Refrigerator, Solid State, Biological, DLA-50T	A-5
4110-01-287-7111	Refrigerator, Solid State, Biological, RCB42P	A-6
4110-01-352-3653	Refrigerator, Mechanical, Blood Bank, FT2TRBLB	A-7
6515-01-185-8446	Anesthesia Apparatus, Nitrous Oxide, 885A	A-8
6515-01-291-1199	Defibrillator ECG Monitor/Recorder, HP 43110MC	A-10
6515-01-453-4003	Defibrillator ECG Monitor/Recorder, LIFEPAK 10	A-14
6520-00-139-1246	Compressor Dehydrator, Dental, M5 Series	A-16
6520-01-272-4531	Dental Operating Unit, ADEC Model 3406 Porta-Cart	A-19
6520-01-333-5961	Operating and Treatment Unit, Dental, FUS336	A-21
6520-01-398-4613	Compressor Dehydrator, Dental, PAC 6.7	A-22
6525-01-099-2320	X-Ray Apparatus Field Dental, D3152	A-24
6525-01-303-6235	X-Ray Process Machine, AFP14X3MIL	A-25
6525-01-312-6411	X-Ray Apparatus, Radiographic/Fluoroscopic, CS-8952	A-26

(continued) TABLE 1-1. 10 PMCS STANDARDS LOCATED IN APPENDIX A

NSN	EQUIPMENT NAME AND MODEL	PAGE
6525-01-325-3740	Portable X-Ray System, 1200	A-29
6525-01-370-7552	Portable Dental X-Ray System, ALPHA MPDX	A-32
6525-01-384-9296	X-Ray Apparatus, LCROKS	A-34
6525-01-422-6122	X-Ray Processor with Daylight Loader, MM190	A-35
6530-00-926-2151	Sterilizer, Surgical Dressing 16X36 in., M-138	A-39
6530-01-327-0686	Ventilator, Volume, Portable, 750M	A-43
6530-01-374-8903	Portable Ventilator, 15304	A-45
6540-00-116-5780	Edging Machine Ophthalmic Lens, Horizon II	A-47
6630-01-300-8711	Analyzer, Sodium Potassium, 614	A-49
6630-01-316-5085	Centrifugal Hematology Analyzer System with QBC II Reader, Model 4477 and QBC Centrifuge, Model 4207	A-53
6630-01-364-8555	Analyzer, Blood Gas, 4300M	A-54
6630-01-376-9823	Analyzer, Clinical Chemistry, DT60	A-57

1-3. REPAIRER LEVEL PMCS

a. Appendix B contains a list of tasks to be performed by the unit level repairer. These PMCS tables are also referred to as "20 PMCS" requirements.

b. The following is a list of PMCS table column headings with a description of the information found in each column:

(1) Item Number. This column shows the sequence in which to do the PMCS, and is used to identify the equipment area on DA Form 2404.

(2) Interval. This column shows when each PMCS item is to be serviced: M – Monthly, Q – Quarterly, S – Semiannually, and A – Annually.

(3) Item to be Inspected and Procedure. This column identifies the general area or specific part to be checked or serviced.

(4) Equipment is not Mission Capable If. This column lists conditions that make the equipment unavailable or unusable.

c. When the equipment must be kept in continuous operation, check and service only those items that will not disrupt operation. Perform the complete daily checks and services when the equipment can be shut down.

d. The following list in Table 1-2 is the "20 PMCS" charts located in Appendix B. This Table identifies the NSN, the name and model of the equipment, and the page number.

TABLE 1-2. 20 PMCS CHARTS LOCATED IN APPENDIX B

NSN	EQUIPMENT NAME AND MODEL	PAGE
N/A	Generic Repairer Standards	B-1
4110-01-117-3902	Refrigerator, Mechanical, Blood Bank, BBR37-SS-1B-01	B-3
4110-01-159-6922	Refrigerator, Mechanical, Blood Bank, 139875	B-5
4110-01-287-7111	Refrigerator, Solid State, Biological, DLA-50T	B-6
4110-01-287-7111	Refrigerator, Solid State, Biological, RCB42P	B-7
4110-01-352-3653	Refrigerator, Mechanical, Blood Bank, FT2TRBLB	B-8
6515-01-185-8446	Anesthesia Apparatus, Nitrous Oxide, 885A	B-10
6515-01-291-1199	Defibrillator ECG Monitor/Recorder, HP 43110MC	B-11
6515-01-453-4003	Defibrillator ECG Monitor/Recorder, LIFEPAK 10	B-14
6520-00-139-1246	Compressor Dehydrator, Dental, M5 Series	B-19
6520-01-272-4531	Dental Operating Unit, ADEC Model 3406 Porta-Cart	B-21
6520-01-333-5961	Operating and Treatment Unit, Dental, FUS336	B-23
6520-01-398-4613	Compressor Dehydrator, Dental, PAC 6.7	B-25
6525-01-099-2320	X-Ray Apparatus Field Dental, D3152	B-26
6525-01-303-6235	X-Ray Process Machine, AFP14X3MIL	B-28
6525-01-312-6411	X-Ray Apparatus, Radiographic/Fluoroscopic, CS-8952	B-32
6525-01-325-3740	Portable X-Ray System, 1200	B-34
6525-01-370-7552	Portable Dental X-Ray System, ALPHA MPDX	B-36
6525-01-384-9296	X-Ray Apparatus, LCROKS	B-38
6525-01-422-6122	X-Ray Processor with Daylight Loader, MM190	B-41
6530-00-926-2151	Sterilizer, Surgical Dressing 16X36 in., M-138	B-42
6530-01-327-0686	Ventilator, Volume, Portable, 750M	B-43
6530-01-374-8903	Portable Ventilator, 15304	B-45
6540-00-116-5780	Edging Machine Ophthalmic Lens, Horizon II	B-48
6630-01-300-8711	Analyzer, Sodium Potassium, 614	B-49
6630-01-316-5085	Centrifugal Hematology Analyzer System with QBC II Reader, Model 4477 and QBC Centrifuge, Model 4207	B-50
6630-01-364-8555	Analyzer, Blood Gas, 4300M	B-51
6630-01-376-9823	Analyzer, Clinical Chemistry, DT60	B-52

1-4. MAINTENANCE ALLOCATION CHART (MAC)

a. Appendix C provides a general explanation of all maintenance and repair functions authorized at various maintenance levels.

b. The following is a list of MAC table column headings with a description of the information found in each column:

(1) Group Number. This column is a numerical group assigned to each assembly. The applicable assembly groups are listed in the MAC in disassembly sequence beginning with the first assembly removed in a top down disassembly sequence.

(2) Assembly Group. This column contains a brief description of the components of each assembly group.

(3) Maintenance Function. This column lists the various maintenance functions authorized to be performed. These maintenance functions are defined as follows:

(a) Inspect. To determine serviceability of an item by comparing its physical, mechanical, and electrical characteristics with established standards.

(b) Test. To verify serviceability and to detect electrical or mechanical failure using test equipment.

(c) Service. To clean, to preserve, to charge, and to add lubricants, cooling agents, and air. If it is desired that elements, such as painting and lubricating, be defined separately, they may be so listed.

(d) Adjust. To rectify to the extent necessary to bring into proper operation range.

(e) Align. To adjust specified variable elements of an item to bring it to optimum performance.

(f) Calibrate. To determine the corrections to be made in the readings of instruments or test equipment used in precise measurement. Consists of the comparison of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared with the certified standard.

(g) Install. To set for use in an operational environment such as tents or International Standards Organization shelters.

(h) Replace. To replace unserviceable items with serviceable like items.

(i) Repair. Those maintenance operations necessary to restore an item to serviceable condition through correction of material damage to a specific failure. Repair may be accomplished at each level of maintenance.

(j) Overhaul. Normally the highest degree of maintenance performed by the Army in order to minimize time work in process consistent with quality and economy of operation. It consists of that maintenance necessary to restore an item to completely serviceable condition as prescribed by a maintenance standard in technical publications for each item of equipment. Overhaul normally does not return an item to like new condition.

(k) Rebuild. The highest degree of material maintenance, it consists of restoring equipment as nearly as possible to new condition in accordance with original manufacturing standards. Rebuild is performed only when required by operational considerations or other paramount factors and then only at the depot maintenance level.

(4) Maintenance Level. This column indicates the lowest maintenance level authorized to perform the maintenance functions.

"C" is operator or crew	"O" is unit maintenance
"F" is direct support maintenance	"H" is general support maintenance
"D" is depot maintenance	

(5) Tools and Equipment. This column corresponds to tools and test measurement and diagnostic equipment (TMDE) listed in the chart in Appendix E.

(6) Remarks. This column is provided for information pertinent to the maintenance functions.

c. The following is a list of the MACs located in Appendix C.

TABLE 1-3. LIST OF THE MACS LOCATED IN APPENDIX C

NSN	EQUIPMENT NAME AND MODEL	PAGE
4110-01-117-3902	Refrigerator, Mechanical, Blood Bank, BBR37-SS-1B-01	C-1
4110-01-159-6922	Refrigerator, Mechanical, Blood Bank, 139875	C-3
4110-01-287-7111	Refrigerator, Solid State, Biological, DLA-50T	C-5
4110-01-287-7111	Refrigerator, Solid State, Biological, RCB42P	C-6
4110-01-352-3653	Refrigerator, Mechanical, Blood Bank, FT2TRBLB	C-7
6515-01-185-8446	Anesthesia Apparatus, Nitrous Oxide, 885A	C-10
6515-01-291-1199	Defibrillator ECG Monitor/Recorder, HP 43110MC	C-11
6515-01-453-4003	Defibrillator ECG Monitor/Recorder, LIFEPAK 10	C-12
6520-00-139-1246	Compressor Dehydrator, Dental, M5 Series	C-14
6520-01-272-4531	Dental Operating Unit, ADEC Model 3406 Porta-Cart	C-16
6520-01-333-5961	Operating and Treatment Unit, Dental, FUS336	C-18
6520-01-398-4613	Compressor Dehydrator, Dental, PAC 6.7	C-20
6525-01-099-2320	X-Ray Apparatus Field Dental, D3152	C-22
6525-01-303-6235	X-Ray Process Machine, AFP14X3MIL	C-24
6525-01-312-6411	X-Ray Apparatus, Radiographic/Fluoroscopic, CS-8952	C-28
6525-01-325-3740	Portable X-Ray System, 1200	C-31
6525-01-370-7552	Portable Dental X-Ray System, ALPHA MPDX	C-37
6525-01-384-9296	X-Ray Apparatus, LCROKS	C-39
6525-01-422-6122	X-Ray Processor with Daylight Loader, MM190	C-42
6530-00-926-2151	Sterilizer, Surgical Dressing 16X36 in., M-138	C-45
6530-01-327-0686	Ventilator, Volume, Portable, 750M	C-47
6530-01-374-8903	Portable Ventilator, 15304	C-49
6540-00-116-5780	Edging Machine Ophthalmic Lens, Horizon II	C-51
6630-01-300-8711	Analyzer, Sodium Potassium, 614	C-53
6630-01-316-5085	Centrifugal Hematology Analyzer System with QBC II Reader, Model 4477 and QBC Centrifuge, Model 4207	C-54
6630-01-364-8555	Analyzer, Blood Gas, 4300M	C-55
6630-01-376-9823	Analyzer, Clinical Chemistry, DT60	C-56

d. Appendix D contains the equipment parts and accessories list for each item of equipment. The following is a list of the items located in Appendix D.

TABLE 1-4. LIST OF PARTS AND ACCESSORIES LOCATED IN APPENDIX D

NSN	EQUIPMENT NAME AND MODEL	PAGE
4110-01-117-3902	Refrigerator, Mechanical, Blood Bank, BBR37-SS-1B-01	D-1
4110-01-159-6922	Refrigerator, Mechanical, Blood Bank, 139875	D-2
4110-01-287-7111	Refrigerator, Solid State, Biological, DLA-50T	D-3
4110-01-287-7111	Refrigerator, Solid State, Biological, RCB42P	D-4
4110-01-352-3653	Refrigerator, Mechanical, Blood Bank, FT2TRBLB	D-5
6515-01-185-8446	Anesthesia Apparatus, Nitrous Oxide, 885A	D-6
6515-01-291-1199	Defibrillator ECG Monitor/Recorder, HP 43110MC	D-9
6515-01-453-4003	Defibrillator ECG Monitor/Recorder, LIFEPAK 10	D-10
6520-00-139-1246	Compressor Dehydrator, Dental, M5 Series	D-11
6520-01-272-4531	Dental Operating Unit, ADEC Model 3406 Porta-Cart	D-12
6520-01-333-5961	Operating and Treatment Unit, Dental, FUS336	D-14
6520-01-398-4613	Compressor Dehydrator, Dental, PAC 6.7	D-16
6525-01-099-2320	X-Ray Apparatus Field Dental, D3152	D-17
6525-01-303-6235	X-Ray Process Machine, AFP14X3MIL	D-18
6525-01-312-6411	X-Ray Apparatus, Radiographic/Fluoroscopic, CS-8952	D-19
6525-01-325-3740	Portable X-Ray System, 1200	D-20
6525-01-370-7552	Portable Dental X-Ray System, ALPHA MPDX	D-21
6525-01-384-9296	X-Ray Apparatus, LCROKS	D-22
6525-01-422-6122	X-Ray Processor with Daylight Loader, MM190	D-24
6530-00-926-2151	Sterilizer, Surgical Dressing 16X36 in., M-138	D-26
6530-01-327-0686	Ventilator, Volume, Portable, 750M	D-27
6530-01-374-8903	Portable Ventilator, 15304	D-28
6540-00-116-5780	Edging Machine Ophthalmic Lens, Horizon II	D-29
6630-01-300-8711	Analyzer, Sodium Potassium, 614	D-30
6630-01-316-5085	Centrifugal Hematology Analyzer System with QBC II Reader, Model 4477 and QBC Centrifuge, Model 4207	D-31
6630-01-364-8555	Analyzer, Blood Gas, 4300M	D-32
6630-01-376-9823	Analyzer, Clinical Chemistry, DT60	D-33

e. Appendix E contains the tools and TMDE code listing for MACs.