

TECHNICAL MANUAL
OPERATOR, ORGANIZATIONAL, DIRECT
SUPPORT AND GENERAL SUPPORT
MAINTENANCE MANUAL

APPENDIX A

REFERENCES

B MAINTENANCE
ALLOCATION CHART

C COMPONENTS OF END
ITEMS AND
BASIC ISSUE ITEMS

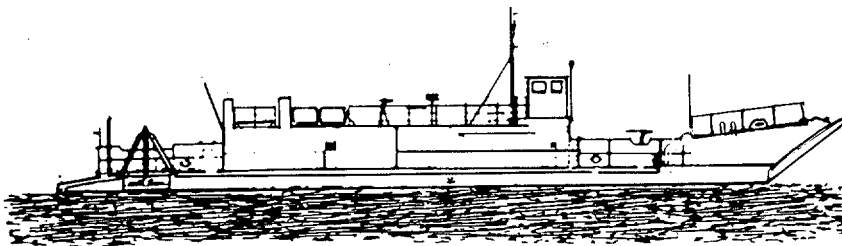
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LANDING CRAFT UTILITY
LCU 1667-1670
NSN 1905-00-168-5764



CHANGE

NO. 55-1905-219-14-12

HEADQUARTERS
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WASHINGTON, D.C., 8 April 1985

Operator, Organizational, Direct
Support and General Support
Maintenance Manual

LANDING CRAFT UTILITY
LCU 1667 - 1670
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| 2. | Lubrication

C91001L |

Fuels, Lubricants, Oil, and Waxes |
| 3. | Painting

TM 9-213 |

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C680011 |

Cleaning and Chemical Products |
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TM 55-1905-219-20P

TM 55-1905-219-34P

DA Pam 738-750 | Unit Maintenance Repair Parts and
Special Tools List

Direct Support, and General Support
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Special Tools List

The Army Maintenance Management System
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| 6. | Shipment and Storage

TB 740-244-3

TB 740-93-2 |

Preservation and Packing of Military Equipment

Preservation of Mechanical Equipment for
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| 7. | Demolition

TM 750-244-3 |

Destruction of Material to Prevent Enemy Use |

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REFERENCES - CONTINUED

8. Communications, Electronics, Navigation (CEN) Equipment Commercial Manuals
- Alden Electronics SATFIND-406 M3 EPIRB
Owner's Manual
- Alden TR-IV Marinefax Technical Manual and
Operator's Manual
- Instruction Book No.
71261 Rev. C and
Instruction Book
Cat. No. 120 and 122
No. 509754
- Belfort Instrument Company Aerovane Indicator
Model 135
- Bendix/King EPH/EPI Series Portable Radio
Owner's Manual
- Bendix/King EPH Series Portable Radio Service
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- Bendix/King LAA Series Battery Chargers
Service Manual
- Dymek DA1 OOD All Wave Receiving Antenna
Owner Information Manual
- Mackay Communications 403A Emergency
Lifeboat Transceiver Instruction Manual
- Naval Electronics Inc. MK22CA/Pba 2205
System Installation and Service Manual
- Newmar Heavy Duty DC-DC Converters
Operation and Installation Instructions
- RMC Document Number
G261404 Rev A
- Raytheon Marine Company Radar Set Model
R40X/R41X AN/SPS-69 Description, Operation
and Maintenance Technical Manual
- Ross Engineering DSC 500 Digital Selective Call
Marine VHF Transceiver Operating Manual
- TM-8080000701
- Sunair Electronics, Inc. Digital Automatic
Antenna Coupler DCU-100 Operation and
Maintenance Manual

Appendix B. MAINTENANCE ALLOCATION CHART (MAC)

Section I. INTRODUCTION

B-1 THE ARMY MAINTENANCE SYSTEM MAC.

a This introduction (Section I) provides a general explanation of all maintenance and repair functions authorized at various maintenance levels under the standard Army Maintenance System concept.

b The Maintenance Allocation Chart (MAC) in Section II designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component will be consistent with the capacities and capabilities of the designated maintenance levels, which are shown in the MAC in column (4) as:

Unit - includes two subcolumns: C (operator/crew) and O (unit) maintenance.
Direct Support - includes an F subcolumn.
General Support - includes an H subcolumn.
Depot - includes a D subcolumn.

c Section III lists the tools and test equipment (both special tools and common tools sets) required for each maintenance function as referenced from Section II.

d Section IV contains supplemental instructions and explanatory notes for a particular maintenance function as referenced from Section II.

B-2 MAINTENANCE FUNCTIONS. Maintenance functions will be limited to and defined as follows:

a Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (i.e., by sight, sound, or feel).

b Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean (includes decontamination, when required), to replace filters, to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases.

d Adjust. To maintain or regulate, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to specified parameters.

e Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

f Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons 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.

g Remove/Install. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.

H Replace. To remove an unserviceable item and install a serviceable counterpart in its place. Replace is authorized by the MAC and is shown as the 3rd position code of the SMR code.

i Repair. The application of maintenance services¹ including fault location/troubleshooting², removal/installation, and disassembly/assembly³ procedures, and maintenance actions⁴ to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), and item, or system.

j Overhaul. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications (i.e., DMWR). Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k Rebuild. Consists of those service/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours, miles, etc.) considered in classifying Army equipment and components.

B-3 EXPLANATION OF COLUMNS IN THE MAC, SECTION II

a Column 1 - Group Number. Column 1 lists functional group code numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the next higher assembly.

b Column 2 - Component/Assembly. Column 2 contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

c Column 3 - Maintenance Function. Column 3 lists the functions to be performed on the item listed in column 2. (For detailed explanation of these functions, see paragraph A-2.)

d Column 4 - Maintenance Category. Column 4 specifies, by the listing of a work time figure in the appropriate subcolumn(s), the category of maintenance authorized to perform the function listed in Column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance categories, appropriate work time figures will be shown for each category. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. The symbol designations for the various maintenance categories are as follows:

- C Operator or Crew
- O Unit Maintenance
- F Direct Support Maintenance (DS)
- H General Support Maintenance (GS)
- D Depot Maintenance

¹Service - Inspect, test, service, adjust, align, calibrate, and/or replace.

²Fault location/troubleshooting - The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or unit under test (UUT).

³Disassembly/assembly - The step-by-step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e., identification as maintenance significant).

⁴Actions - Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

e Column 5 - Tools and Equipment. Column 5 specifies, by number code, those common tool sets (not individual tools); special tools; Test, Measurement, and Diagnostic Equipment (TMDE); and support equipment required to perform the designated function, which shall be keyed to the tools listed in Section III.

f Column 6 - Remarks. This column shall, when applicable, contain a letter code, in alphabetic order, which shall be keyed to the remarks contained in Section IV.

B-4 EXPLANATION OF COLUMNS IN TOOL AND TEST EQUIPMENT REQUIREMENTS, SECTION III.

a Column 1 - Reference Code. The tool and test equipment reference code correlates with a number code used in the MAC, Section II, Column 5.

b Column 2 - Maintenance Category. The lowest category of maintenance authorized to use the tool or test equipment.

c Column 3 - Nomenclature. Name or identification of the tool or test equipment.

d Column 4 - National Stock Number. The National stock number (NSN) of the tool or test equipment.

e Column 5 - Tool Number. The manufacturer's part number.

B-5 EXPLANATION OF COLUMNS IN REMARKS, SECTION IV.

a Column 1 - Reference Code. The letter code recorded in Column 6, Section II.

b Column 2 - Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC, Section II.

Section II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT	(6) REMARKS
			UNIT		DS	GS	DEPOT		
			C	O	F	H	D		
0100	Propulsion Unit, (Engine/Marine Gear)								
0101	Engine	Inspect Test Service Replace Repair Overhaul	0.2 1.0 2.0 1.5		8.0 100.0 18.0		*	1,2	L
0101A	Marine Gear	Inspect Test Service Replace Repair Overhaul	0.2 1.0 2.0 1.5		8.0 100.0 18.0		*		A L
0102	Engine/Transmission Controls	Inspect Test Service Adjust Replace Repair	0.3 0.2 0.2 1.0 10.0 1.0		10.0				
0102A	Emergency Shut Down	Inspect Test Replace Repair	0.3 0.2 10.0 1.0		10.0				
0102B	Alarm System	Inspect Test Replace Repair	0.3 0.2 10.0 1.0		10.0				
0103	Governor	Inspect Test Service Adjust Replace Repair	0.1 1.0 0.2 0.2 0.4 1.0					3, 4,5, 6	

Section II. MAINTENANCE ALLOCATION CHART (Cont.)

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT	(6) REMARKS
			UNIT		DS	GS	DEPOT		
			C	O	F	H	D		
0104	Air Intake	Inspect Service Replace Repair	0.2 0.2 3.5 1.5						
0105	Blower	Inspect Service Replace Repair	0.2 0.2 1.5 1.0					8,9 7	
0106	Fuel Pump	Inspect Replace Repair	0.2 1.0 1.5					10,11	
0107	Fuel Filter, Strainer and Fuel Lines	Inspect Service Replace Repair	0.1 0.5 2.0 1.5						
0108	Fuel Injector	Inspect Test Service Replace Repair	0.1 0.3 0.2 1.5 1.5		0.5			14 12,13,15	
0109	Lube Oil Filters and Housing	Inspect Service Replace Repair	0.2 0.4 1.5 1.4		1.5	(weld)			
0110	Oil Cooler	Inspect Replace Repair	0.1 1.2 1.5		2.5				
0111	Fresh Water Pump	Inspect Replace Repair	0.2 1.2 2.5		3.0			11,16,17,18, 19,21,52	D

Section II. MAINTENANCE ALLOCATION CHART (Cont.)

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT	(6) REMARKS
			UNIT		DS	GS	DEPOT		
			C	O	F	H	D		
0112	Expansion Tank	Inspect Service Test Replace Repair	0.1 0.2 0.5 2.5 1.7	2.5					
0113	Water Con- nections	Inspect Replace	0.2 2.0						
0114	Water Manifold	Inspect Replace Repair	0.2 1.5		3.0	(weld)			
0116	Thermostat and Housing	Inspect Test Replace Repair	0.2 0.5 0.4 1.3		2.0	(weld)			
0118	Tachometer Drive	Inspect Replace Repair	0.1 1.6 2.0						
0119	Instrument Panel	Inspect Replace Repair	0.1 1.5 2.0						
0120	Crankshaft Pul- ley and Vibration Dampener	Inspect Replace Repair	0.2 3.0		2.5			21,40	
0121	Balance Weight Cover and Accessory Drive	Inspect Replace Repair	0.2		2.5 3.5			40	
0122	Engine Supports , Lift Brackets and Crankshaft Front Cover	Inspect Replace Repair	0.1 0.5		1.5				
0123	Exhaust Mani- fold and Fittings	Inspect Replace Repair	0.2 3.0 3.0		3.0			40	