



Cut-a-way of Life Vest

LIFE PRESERVER YOKE, TRAPPED AIR TYPE, ORAL INFLATED DESIGN 9008 (NSN 4220-00-783-6609)

HEADQUARTERS, DEPARTMENT OF THE ARMY SEPTEMBER 1979



WARNING

This life preserver will not be issued to nor worn by personnel assigned or attached to US Army vessels or amphibious or other landing craft. Crew members serving on such craft must have life saving equipment ready for instant use.

WARNING

If the life preserver has any cuts tears, rips, broken hardware, torn straps or oily or greasy areas, or if there is any doubt about it's serviceability, DO NOT USE! Turn in for replacement.

TECHNICAL MANUAL

HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON, DC, September 28, 1979

TM 5-4220-203-12

OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL FOR LIFE PRESERVER YOKE, TRAPPED AIR TYPE, ORAL INFLATED DESIGN 9008 NSN 4220-00-783-6609

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes, or know of a better way to improve the procedures, please let us know. Mail your DA Form 2028 recommended Changes to Publications and Blank Forms) directly to the Commander, US Army Troop Support and Aviation Materiel Readiness Command, ATTN: DRSTS-MTPS, 4300 Goodfellow Boulevard, St. Louis, MO 63120. A reply will be sent directly to you.

		Para graph	Page
CHAPTER	1.	INTRODUCTION	
Section	I.	General	
		Purpose and scope 1-1	1-1
		Maintenance forms and	
		records1-2	1-1
		Reporting equipment	
		improvement recommen-	
		dations1-3	1-2
		Destruction of army	
		material to prevent	
		enemy use1-4	1-2
	II.	Description and Data	
		Description1-5	1-3
		Physical data1-6	1-3
CHAPTER	2.	HOW TO USE LIFE	
		PRESERVER	
Section	١.	General	
		Use of life vest2-1	2-1
	II.	Fitting, adjusting and	
		inflating	
		Fitting and adjusting2-2	2-1
		Inflating the life preserver2-3	2-10
		Deflating the life preserver2-4	2-12
CHAPTER	3.	MAINTENANCE	
o <i>i</i> :		INSTRUCTIONS	
Section	Ι.	Preventive maintenance	
		checks and services	
		(PMCS)	
		General3-1	3-1
		Preventive Maintenance	
		Checks and services	0.4
		(PMCS)	3-1
	п.	Maintenance procedures	2.0
		General	3-2
		Inspection	3-3

			Para graph	Page
CHAPTER	4.	ORGANIZATIONAL	0 /	Ū
		MAINTENANCE		
Section	I.	Services upon receipt of material		
		Inspection procedure	4-1	4-1
		Inspection tagging	. 4-2	4-1
	II.	Repair parts, special tools		
		and equipment		
		General	. 4-3	4-2
	Ш	Preventive maintenance		
		checks and services		
		Inspection requirements .	4-4	4-2
	IV.	Maintenance of life		
		preservers		
		, General	. 4-5	4-3
		Packing procedures	. 4-6	4-3
		Storage	. 4-7	4-7
Appendix	Α.	REFERENCES		A-1
	В.	MAINTENANCE		
		ALLOCATION CHART		
	(MA	λC)		B-1

Section I. GENERAL

1-1. Purpose and Scope

This manual is for use in using and maintaining the Life Preserver Yoke, Trapped Air Type, Oral Inflated, Design 9008. This vest* is a survival item designed to be worn by soldiers in army units taking part in bridging operations and other activities over and around water and those being transported by various types of Marine craft with the exception of Army vessels, which have their own life-saving TOE, and those engaged in landing and assault operations which require life preservers ready for instant use. This vest replaces the life preserver, yoke, gas bottle or mouth inflated, FSN 4220-542-5717, which is obsolete.

1-2. Maintenance Forms and Records

The maintenance forms and records that you need are explained in TM 38-750, The Army Maintenance Management System (TAMMS). *The terms "vest" and "preserver" will be used interchangeably in this manual.

*The terms "vest" and "preserver" will be used interchangeably in this manual.

1-3. Reporting Equipment Improvement Recommendations (EIR's)

If your Life Preserver needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to the Commander, US Army Troop Support and Aviation Materiel Readiness Command, ATTN: DRSTS-MEM, 4300 Goodfellow Boulevard, St. Louis, MO 63120. A reply will be sent directly to you.

1-4. Destruction of Army Material to Prevent Enemy Use

The decision to destroy Government equipment rests with divisional and higher commanders. However, higher commanders can delegate the decision to subordinate commanders when the situation requires. Destruction of the life vest can be accomplished by either of the following methods:

a. Rip or tear holes in the preserver with a knife, sharp tool, or any means available.

b. Saturate with gasoline, oil or diesel fuel and ignite.

Section II. DESCRIPTION AND DATA

1-5. Description

The life preserver consists of five individual air spaces, a front collar and a mouth inflation tube and valve installed on the front collar. Air blown through the tube enters the vest and inflates the air spaces and collar, inflating the preserver and providing buoyancy. When worn in water the user's body floats at an angle of approximately 30 degrees with the front part of the head above water; the chin resting on the collar.

1-6. Physical Data

Specification	MIL-L-52413 (MO)
NSN	4220-00-783-6609
Length	
Inflated	27 inches {68.58 cm)
Deflated	26.5 inches 67.3 cm)
Width	
Inflated	15 inches (38 cm)
Deflated	16 inches (40.64 cm)
Thickness	
Inflated /Vest)	4.0 inches (10.16 cm)
Inflated /Collar)	8.0 inches /20.32 cm)
Deflated /Vest)	3/4 inch (1.9 cm)
Deflated /Collar)	11/2 inches (3.8 cm)
Weight	Approx. 11/2 lbs. (.68 kg)
Inflation /PSI)	Approx. 2lbs. /.140 kg/cm2)
Supportive Weight	Approx. 500 lbs. /227 kg)
Color	Black or Blue
Size Designation	Adult
Component Material	
Silicon-Rubber-Coated Nylon Twill	
Use/Stored Life	
7 years from date of manufacture	





CHAPTER 2 HOW TO USE THE LIFE PRESERVER

Section I. GENERAL

2-1. Use of Life Vest

This chapter gives all the information necessary for instructors to train soldiers in the use of the life vest as well as for individual instruction. The individual must know how to adjust, wear, and inflate the life preserver. Proper fit is necessary if it is to support the wearer in water without slipping off, and it is important to know how to inflate the preserver-maybe in an emergency situation-so that it will keep the soldier afloat.

Section II. FITTING, ADJUSTING AND INFLATING

2-2. Fitting and Adjusting

It is a simple matter to adjust the life vest for fit. An adjustable neck strap fits around the back of the neck which can be shortened or lengthened as necessary for fit and comfort. A snap hook at the end of the strap hooks into a snap ring provided. An adjustable band fits around the waist which can also be shortened or lengthened to allow for varying waist size and/or gear. The waistband has a snap hook on each end to snap into a ring pair provided.



LIFE PRESERVER, FRONT VIEW, INFLATED



LIFE PRESERVER, BACK VIEW, INFLATED



2-4





BACK VIEW OF VEST · DEFLATED



2-7



SIDE VIEW OF VEST - INFLATED

REAR VIEW OF VEST - INFLATED

2-3. Inflating the Life Preserver

The Life Preserver can be quickly and easily inflated as follows:

a. After removing inflation tube from retaining loop, unlock spring loaded mouthpiece valve by unscrewing knurled locking ring in the direction of the tube, as shown below.

Mouth Inflation Tube Detail (As Seen By Wearer)

b. Hold rubber mouthpiece open with fingers or by pressing against teeth. Blow air into vest until it is inflated. Allow mouthpiece to spring closed between breaths so it will retain air. Inflation time should be 30 to 45 seconds.

 $\emph{c.}$ After the vest has been inflated, lock mouthpiece value by screwing knurled locking

ring toward mouthpiece end of tube. Put the inflation tube back into the retainer loop to prevent it from being caught on something and torn off.

NOTE

The necessary inflation pressure is about 2 PSI, which is about maximum pressure possible for most people.

2-4. Deflating the Life Preserver

The Life Vest can be deflated in any number of ways. Two of the most convenient methods are given below:

a. Hold mouthpiece inflation valve open and suck air from vest. Allow valve to spring closed between breaths. Continue until vest is completely deflated.

b. Use vacuum pump to suck air from vest while mouthpiece valve is held open (this method should be used when a large number of vests have to be deflated after being tested).

CHAPTER 3 MAINTENANCE INSTRUCTIONS

Section I. PREVENTATIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

3-1. General

To make sure that vest is ready for use at all times, it must be inspected at regular intervals so that defects will be found and corrected (or the vest discarded before they cause failure in use. The necessary PMCS to be performed are listed and described in paragraph 4-4. The item numbers indicate the order of minimum inspection requirements. Defects found during use of the preserver will be noted as soon as possible after use and recorded on DA Form 2404 (Equipment Inspection and Maintenance Worksheet). A few defects can be corrected (such as a missing waistband), but since no repairs are authorized, defects are to be noted in Column "c". Column "d" should indicate that the vest has been returned to higher echelon for replacement.

3-2. Preventive Maintenance Checks and Services (PMCS).

Refer to the PMCS table for a listing of the

operator's periodic (daily and weekly) preventive maintenance checks and services.

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DA Form 2404 {Equipment inspection and Maintenance Worksheet)

Section II. MAINTENANCE PROCEDURES

3-3. General

It is up to the individual who is assigned a life vest to submit it for regular inspection and testing.

3-4. Inspection

Inspect the vest for any of the following defects:

3-3

If any of these are found send the vest to higher echelon for further inspection and replacement.

WARNING

If there is any doubt about the serviceability of the life vest, turn it in for replacement.

CHAPTER 4

ORGANIZATIONAL MAINTENANCE

Section I. SERVICES UPON RECEIPT OF MATERIAL

4-1. Inspection Procedure (120-day Inspection)

Visually inspect the life preserver for the defects listed in paragraph 3-4. If no defects are apparent, perform a leakage test as follows:

a. Innate the vest to 5 PSIG (pounds per square inch-gaged) with moisture-free air. After a minimum of 5 minutes gage the pressure again. It should still read 5 pounds. If it does not, condemn the preserver.

b. If the vest passes the inflation test, reduce pressure to 2 PSIG and totally submerge in water for at least 5 minutes. If there is any leakage or material failure (such as seam separation), reject the preserver.

4-2. Inspection Tagging

When inspection and leakage testing has been completed, thoroughly air-dry the preserver. Using TAG, Blank, NSN 8135-00-292-2350, or other suitable tag, write down the inspection date and inspector's initials. Attach the tag to the top left hand snap ring. Observe the following:

a. If defects are found during inspection, mark 'Condemned" on the tag with the defects found. Return vest to higher echelon for replacement.

b. If the vest is found to be serviceable—and is to be repacked—follow packing procedures in paragraph 4-6.

Section II. REPAIR PARTS,

SPECIAL TOOLS AND EQUIPMENT

4-3. General

No repair parts, special tools or equipment are issued with, or are authorized for the life preserver. Therefore, no repairs of any kind are to be made. Exception: A waistband missing from an otherwise serviceable vest can be cannibalized from an otherwise unserviceable vest. A waistband is considered good if:

a. Both snap hooks are present and in good condition with no rust. Good tension on snap springs.

b. Adjustment slider present and workable with no rust.

c. Waistband is in good condition with no cuts, tears, frays, holes, abrasions, or grease, oil, or motor fuel stains.

d. Waistband stitching in good condition; tight, with no broken or loose threads.

Section III. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

4-4. Inspection Requirements

The PMCS table contains a list for the minimum

inspection requirements. An "X" in a column indicates when the inspection is to be made.

Section IV. MAINTENANCE OF LIFE PRESERVERS

NOTE

Before cleaning a batch of Life Vests, remove the bad ones and tag for replacement.

4-5. General

Maintenance of the Life Preserver is limited to cleaning and servicing as follows:

a. Rinse thoroughly in fresh clean water and dry completely. This is especially important if the vest was used in salt water or exposed to salt spray.

b. If the preserver is dirty wash with a mild soap and warm water. Use a soft brush if necessary to remove the dirt, but be careful not to damage the fabric.

c. After washing the vest, air dry thoroughly.

4-6. Packing Procedures

Be sure to follow the instructions below when packing the Life Vest.

CAUTION

Make sure the preserver is completely deflated and dry before packing. Be sure the mouth inflation tube and valve are not kinked or bent when packed.

a. Using duct tape or other suitable material,

tape all snap rings and hooks, and tape up the slack in the neck strap and waistband to prevent the hardware from chaffing the fabric. Tape as shown below.

4-4

b. Dust the vest thoroughly with talc powder, front and back—and especially between the collar and the vest—to prevent the fabric from sticking together and chaffing while packed, as shown below.

c. After the vest has been thoroughly powdered with talc, place on back and fold in bottom edge as shown at the right. Roll up from the bottom toward the collar in a tight roll (see below).

d. When preserver has been tightly rolled up, check to see that mouth tube is not bent or kinked. Then flip vest over and slide into storage box. Be sure inspection tag is at open end of box.

Waterproof/reseal box with tape as specified in PPP-B-636, WFC, Type RSC (see below).

4-7. Storage

Store the Life Preserver as follows:

a. Store vests (in individual boxes) in a cool, dry, dark place.

b. Stack so that air can circulate underneath, around and over the cartons.

c. Store in short stacks or bins so that the bottom boxes and/or cartons will not be crushed.

d. Store in an area away from gas, diesel fuel, grease, and oil and their fumes.

TABLE 4-1 PREVENTIVE MAINTENANCE CHECKS AND SERVICES

			loi rui			D-During Use	M-Monthly
	Us	er		0	rgan	A After Use	
В	W	Α	W	M 120 Days		PROCEDURE	REFERENCE
1 X				x	Inspect for rips, tears, broken thread, damaged or missing hardware, worn or torn straps and oil or grease stains Inspect for air	Para 4-1 Para 4-1b	
F	3	US 3 W	W A	User 3 W A W	User O 3 W A W M 4	User Organ B W A W M 120 Days X X X	User Organ A After Use B W A W M 120 PROCEDURE Days Days Value Value X Inspect for rips, tears, broken thread, damaged or missing hardware, worn or torn straps and oil or grease stains X Inspect for air leaks

APPENDIX A

REFERENCES

A-1. Scope

This appendix lists all forms and technical manuals referenced in this manual.

A-2. Forms

Quality Deficiency Report	SF	368	
Recommended Changes to Publications			
and Blank Forms	DA	Form	2028
Equipment Inspection and Maintenance			
Worksheet	DA	Form	2404

A-3. Technical Manuals

The Army	Maintenance Management System
(TAMMS)	TM 38-750

APPENDIX B

MAINTENANCE ALLOCATION CHART

SECTION I. Introduction

B-1. General

a. This section provides a general explanation of all maintenance and repair functions authorized at various maintenance levels.

b. The Maintenance Allocation Chart (MAC) in section II of this appendix designates overall responsibility for the performance of maintenance functions on the identified end item or component. The implementation of the maintenance functions upon the end item or component will be consistent with the assigned maintenance functions.

c. Section III lists the special tools and test equipment required for each maintenance function as referenced from section II.

d. Section IV contains supplemental instructions on explanatory notes for a particular maintenance function.

B-2. Explanation of Column Entries Used in the MAC in Section II

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to iden

tify 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 Functions. Column 3 lists the functions to be performed on the item listed in column 2. (For detailed explanation of these functions, see pare. B-2).

d. Column 4, Maintenance Level. Column 4 specifies, by the listing of a "work time" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform the maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance levels, appropriate "work time" figures will be shown for each level. The number of man-hours specified by 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, troubleshooting 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 levels are as follows:

С	Operator or crew.
0	Organization maintenance.
F	Direct support maintenance.
Н	General support maintenance.
D	Depot maintenance.

e. Column 5, Tools and Equipment. Column 5

specifies, by code, these common tool sets (not individual tools) and special tools, test, and support equipment required to perform the designated function.

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

B-3. Explanation of Column Entries Used in the MAC in Section III

a. Reference Code. The reference code is the same code scheme as recorded in column (5), section II.

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

B-3

SECTION II. MAINTENANCE ALLOCATION CHART

Life Preserver, Oral Inflated, Design 9008 NSN 4220-00-783-6609

(1) (2)	(3) Maintenance Functions										(5)
	A	B	С	D	E	F	G	н	I	_	
Functional Group	Inspect	Test	Service	Adjust	Align	Calibrate	Replace	Rapair	install	Speciel Too & Equip.	Remarks
01 Life Preserver, Yoke, Design 9008	с	0.2	0 .1	С			с				A-A A-B A-C B-D

B-4

SECTION III. MAINTENANCE ALLOCATION CHART

DATE	PAGE	OF

FOR Life Preserver, Yoke, Oral ______ Inflation, Design 9008 NSN 4220-00-783-6609

REFERENCE CODE	REMARKS
A-A	Inspect for rips, tears, broken thread, damaged or missing hardware, worn or torn straps and oil or grease stains.
A-B	120-day inspection
A-C	Cleaning and preserver
B-D	Adjust for fit

By Order of the Secretary of the Army:

E. C. MEYER General, United States Army Official: Chief of Staff

J. C. PENNINGTON Major General, United States Army The Adjutant General

Distribution:

To be distributed in accordance with DA Form 12-25A, Operator Maintenance requirements for Individual, Life Preserver.

U.S. GOVERNMENT PRINTING OFFICE: 1979 0-961/5046

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