Chapter 3

LIFE JACKET LAMP, TYPE A

LIST OF CONTENTS

LIST OF ILLUSTRATIONS

LEADING PARTICULARS

Life jacket lamp, Type A	*Stores Ref. 5A/3739*
Incorporating—	
Filament lamp, M.E.S., 3-volt, 2-watt ...	*Stores Ref. 5L/X951277*
Housing retaining clip	*Stores Ref. 5A/4074*
Washer, cord and tape assembly	*Stores Ref. 5A/4075*
Plastic dome for filament lamp	*Stores Ref. 5A/3824*
Sealing washer for plastic dome	*Stores Ref. 5A/3825*
Dimensions	$5\frac{5}{8}$ *in.* $\times$ $4\frac{7}{8}$ *in.* $\times$ $1\frac{1}{4}$ *in.*
Weight	*18 oz.*
Tool for dome removal	*Stores Ref. 5A/3826*

Introduction

1. The life jacket lamp, Type A, is fitted to aircrew life jackets, Mk. 2 and 3, and is stowed in the pocket on the right-hand side when not in use. The purpose of the lamp is to indicate the position of persons floating in the sea at night, and so to enable them to be rescued. The life jackets and associated equipment are described in A.P.1182E, Vol. 1, Sect. 2.

DESCRIPTION

2. The life jacket lamp (*fig.* 1) consists of a battery, a yellow nylon skull cap on which the filament lamp is mounted, and a cable, all stowed inside a water-tight plastic case. The skull cap and the cable are stowed in a compartment on the side of the battery case, with the lamp housing protruding.

3. The battery is of the salt water type, as described in A.P.4343, Vol. 1, Sect. 3. The plates are silver chloride and magnesium, and are activated when in contact with fresh or salt water. When the skull cap and lamp are pulled out of the case, water can enter the battery through holes in the side compartment shown in fig. 2, and so render the battery operative. The battery can be used only once, and has a minimum life of 16 hours at full brilliance.

4. The lamp is attached to the jacket by a 39-in. nylon lanyard. A 3-volt, 2-watt filament lamp protected by a plastic screw-on

dome is mounted on a housing secured to the skull cap. When the skull cap and cable are stowed inside the case, the joint between the flange of the housing and the case is sealed by a retaining clip. The retaining clip is released automatically by a nylon cord when the nylon tape strip which is attached to the lamp housing is pulled. After the clip is released, the nylon tape is used to pull the lamp housing from the battery case. This is a modification of the original design of the lamp, in which pulling the tape released the clip only, and the lamp housing had to be pulled from the battery case by hand.

Instructions for use

5. (1) If necessary, take the lamp out of its pocket. It may be more convenient not to remove it completely, but merely to open the pocket so that the skull cap and cable can be withdrawn.

(2) Pull the nylon tape sideways to release the retaining clip.

Note . . .

The clip must not be removed until the lamp is required for immediate use, otherwise water may seep through to the battery.

(3) By pulling on the nylon tape in an upward direction, draw out the lamp housing, and put on the skull cap. The cap is a loose fit and may be worn on a bare head, a helmet, or an immersion suit hood. The Y-shaped securing lines on each side of the cap should pass over the ears, as on a water-polo cap, and the drawstring should be pulled tight under the chin.

(4) If the survivor is in the water, the battery may be left in the life jacket pocket. If the survivor is in a dinghy, the battery should be placed over the side in the water. The lanyard will take the weight and not the electric cable.

SERVICING

Testing

6. Inspect the battery visually to ensure that it has not been activated. This state is indicated by traces of white powder formation around the edges of the plates.

7. Remove the plastic dome with the special tool provided. This is done by

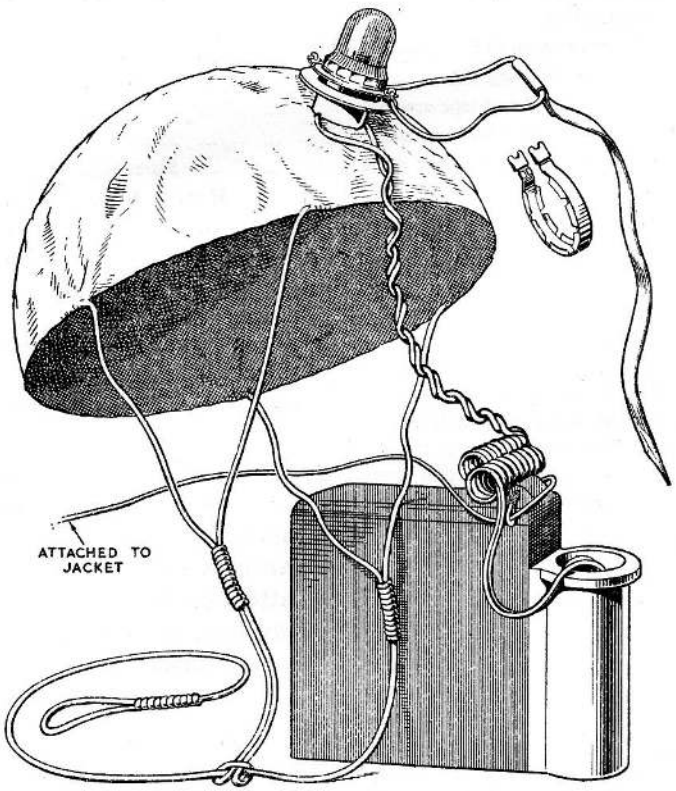

Fig. 1. Skull cap, with lamp and battery

pressing the tool down over the dome so that the rubber sleeve seats on the shoulder of the dome, and turning in an anti-clockwise direction. Remove the filament lamp and test for correct operation.

8. Connect a high-resistance voltmeter across the terminals which are exposed by the removal of the filament lamp. The reading should be zero. If any reading is shown, this indicates that moisture has entered and the battery has become activated.

◀**9.** The filament lamp housing and the washer cord and tape assembly, of items in use or held as spare, should be examined for freedom of removal every three months. A smear of silicone grease, Stores Ref. 34B/237 should be applied to the underside of the compressed neoprene washer and the lamp housing which bears on the inside of the polythene battery case.

Note . . .

Care must be taken to ensure that the seal to the battery is maintained in a serviceable condition so that moisture cannot enter and activate the battery.▶

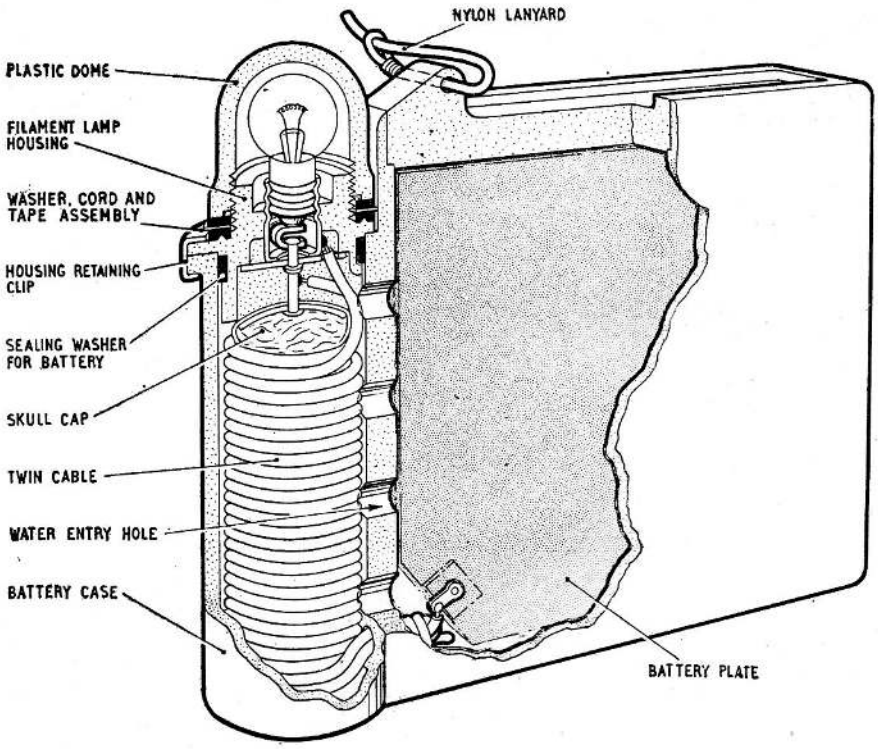

Fig. 2. Sectional view of lamp

AP2011 191451/2663 7/57 3,125 D&Co.(S)Ltd. 539/5