Owner's Manual SMA2000 Series

MODEL 2000, MODEL 2050, MODEL 2100 MODEL 2158

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AMENDMENT LIST

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SECTION 1. **DESCRIPTION:**

1.1 GENERAL

ROARING FORTIES 2000 SERIES inflatable life preservers are designed to exceed F.A.A. T.S.O. C13f and are approved by the Australian Civil Aviation Safety Authority to the T.S.O. C13f specification on Certificate of Type Authority 181-1 Issue 2. The series are manufactured from radio frequency welded high-grade yellow buoyancy fabric. They consist of twin independent buoyancy chambers, fitted with varying waist-belt arrangements depending on the model. The life preservers are designed to provide optimum balance between buoyancy value and supported attitude. Each of the life preservers in the series has identical buoyancies with in excess of 156 Newtons of buoyancy when inflated by twin 18-gram disposable CO_2 gas cylinders or by mouth.

Standard location aids in the form of a T.S.O.C85 approved rescue-light and whistle is fitted in convenient locations on opposite sides of the life preserver. Retro reflective patches can be added on request. The MODEL 2000 and MODEL 2050 life preservers are fully reversible PAX type jackets normally packed in approved flame-resistant tear-open packets for under seat stowage and for emergency wear only. The MODEL 2100 life preserver is designed for constant wear and is not reversible though donning is simple and easy.

All the life preservers in the S.M.A. 2000 Series are operated manually by conventional "JERK TO INFLATE" pull tags fitted to HALKEY-ROBERTS operating heads, which when operated "fire" the stored gas in the CO_2 cylinders into the buoyancy chambers for inflation. When the life preserver is fully inflated it will support the wearer at the correct angle to keep the wearer's nose and mouth clear of the water, conscious or not. The life preserver is self-righting when properly donned.

Should the stored pressure CO_2 system fail to inflate the life jacket, an oral inflation tube is positioned close to the wearer's mouth on either side of the life preserver, and the life preserver may be inflated by blowing into the oral inflation tubes.

1.2 INFLATION EQUIPMENT

1.2.1 MECHANICAL INFLATION

The jacket is inflated by two HALKEY-ROBERTS operating heads fitted with 18-gram CO_2 disposable cylinders. The jacket is inflated by manually pulling a “Jerk to Inflate” toggle attached by a cord to an operating lever on one side of each of the operating heads. Pulling the toggles cause, the operating levers to force slotted pins into the closing caps of the CO_2 cylinders, which allow CO_2 gas to flow through the internal ducting of the operating heads via Schrader valves, contained within the inflation manifolds into the buoyancy chambers thus inflating the life preserver.

1.2.2 ORAL INFLATION

Oral inflation is accomplished by the wearer locating the oral inflation tubes positioned close to the wearer's mouth on either side of the life preserver and blowing air directly into them.

1.3 AUXILIARY FITTINGS

1.3.1 . SEA-LIGHT

A TSOC85 approved water activated rescue-light is fitted to each S.M.A. 2000 SERIES life preserver. The light is attached to one side of the life preserver and the battery is attached to the central waist belt attachment strop in a manner that facilitates easy replacement.

The rescue-light currently fitted is an A.C.R. type L8-4A.

1.3.2 WHISTLE

A plastic pea-less whistle is fitted to the opposite side of the buoyancy to the sea-light. It is fitted in an elastic becket and is connected to the life preserver by a lanyard.

SECTION 2. **OPERATIONS**

2.1 DONNING THE LIFE PRESERVER MODEL 2000

The life preserver contained within its lightweight cover is brought in front of the intending wearer. The “tear off to open” tag is removed by pulling to expose the life preserver. The neck of the life preserver is placed over the head of the wearer and the two ends of the waist belt located. The long end of the life preserver waist-belt is located and the long end passed behind the wearer and done up by pushing the nylon ends of the belt together until they lock with an audible “click. The waist belt is adjusted by pulling on the loose end of the belt until a firm fit is obtained.

2.2 . DONNING THE LIFE PRESERVER MODEL 2050

The life preserver contained within its lightweight cover is brought in front of the intending wearer. The “tear off to open” tag is removed by pulling to expose the life preserver. The neck of the life preserver is placed over the head of the wearer and the two ends of the waist belt located. The arms are placed through the waist belts and pushed downwards to pull the back strap out of the buoyancy chamber neck area behind the wearer. The straps are then adjusted by pulling the two yellow tabs on the ends of the belts away from the body until a firm fit is obtained.

2.3 DONNING THE LIFE PRESERVER MODEL 2100

The life preserver contained within its lightweight valise is brought in front of the intending wearer. The neck opening is placed over the wearers head and the ends of the waist belt located. The belt is then adjusted by pulling on the loose end of the belt until it is firmly tightened.

2.4 DONNING SMA2150

The life preserver contained within its lightweight pouch stowed on the hip. The pouch is brought in front of the wearer. The pouch is opened and the life preserver is pulled out. The neck opening is placed over the wearers head and the ends of the waist belt located. The belt is then adjusted by pulling on the loose end of the belt until it is firmly tightened.

2.5 DONNING LIFE PRESERVER MODEL 2158

Hold jacket with the front facing intended wearer. Unclip the 50mm wide waist belt. Place the right arm between the back strap and the left side of the buoyancy. Place the left arm between the back strap and the opposite side of buoyancy.

Clip 50mm wide waist belt around waist and 25mm wide clip across the chest. Place the 25mm wide leg straps between legs. Do not cross. The straps are then adjusted by pulling on the loose end of the straps until they are firmly tightened.

Once the jacket is inflated, the spray hood can be pulled down after releasing it from the Velcro retainer and secured by the Velcro tabs on the skirt of the hood and on the underside of the front buoyancy.

2.6 MANUAL INFLATION: S.M.A. 2000 SERIES

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WARNING: DO NOT ORALLY FULLY INFLATE OR PARTIALLY INFLATE THE LIFE PRESERVER PRIOR TO OPERATING CO_2 SYSTEM.

SUCH ACTION MAY CAUSE THE LIFE PRESERVER TO BURST RENDERING IT UNUSABLE.
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When the life preserver is donned and properly secured the life preserver may be manually CO_2 inflated by pulling firmly downwards on the red "JERK TO INFLATE" toggles.

2.7 ORAL INFLATION: S.M.A. 2000 SERIES

In the unlikely event the CO_2 inflation system fails to inflate the life preserver it may be inflated orally by means of the oral inflation tubes positioned either side of the life preserver near the wearer's mouth.

SECTION 3. **DATA**

3.1 S.M.A. 2000 SERIES AVIATION LIFE PRESERVERS

WEIGHT: 690gram to 850gram

BUOYANCY: >>156N

3.2 CO_2 CYLINDER: 2 x 18gram x 3/8” thread (disposable)

3.3 SEA LIGHT: TYPE: A.C.R. L8-4A F.A.A. T.S.O.C85 Approved.

WEIGHT: 60g

VISIBILITY :>> 1.0 Nautical Miles

DURATION: 8Hr Min.

3.4 LIFE PRESERVER SERVICE INTERVAL: SEE TABLE 1

SECTION 4. **STOWAGE OF LIFE PRESERVER**

4.1 STOWAGE: S.M.A. 2000 SERIES AVIATION LIFE PRESERVERS

REMEMBER Life preservers could save your life and should be treated with the utmost care.

When not in use the life preserver should be stowed in a clean, dry and well-ventilated area. It should not be stowed adjacent to or with fuels, oils, greases, or solvents. It should also not be stowed near heat emitting devices or in direct sunlight. Provided the above conditions are obtained, the life preserver may be stowed continuously between the annual inspections, ready for use.

4.2 Operational and storage temperatures for Life preservers

-10° - 60°C

SECTION 5. **INSPECTION AND MAINTENANCE S.M.A. 2000 AVIATION LIFE PRESERVERS**

5.1 Maintenance Schedule

Life preservers are to be subject to a visual inspection and Maintenance inspection in accordance with Table 1.
For the SMA2000() Dates of such inspections are to be recorded in Table 2 The SMA2000 Life preserver Inspection Log

Table 1

Visual Inspection and Maintenance Schedule

Model	Maximum Visual Inspection interval	1st Maintenance interval	Subsequent Maintenance interval
SMA2000()	Annually	5 years	5 years
SMA2100()	Prior to use	2 years	1 Year
SMA2150	Prior to use	2 years	1 Year
SMA2158	Prior to use	2 Years	1 Year

5.2 VISUAL INSPECTION

5.2.1 SMA2000 Annual inspection

5.2.2 The SMA2000 shall be inspected for evidence of

a) any holes, tears or puncture marks

b) An expired service date

c) Jackets removed from their packaging

5.2.3 If any of the above has occurred the jacket shall be withdrawn from service and undergo a full maintenance schedule

5.3 PRIOR TO USE INSPECTION SMA2100, SMA2150, SMA2158

5.3.1 Any life preserver with obvious external damage, inflated or deployed for an actual emergency or demonstration must be withdrawn from service until a full service inspection has been carried out.

5.4 MAINTENANCE INTERVAL INSPECTION

In accordance with table 1 the jacket shall be returned to a Safety Marine Australia approved service station where the jacket shall undergo an service and inspection in accordance with the SMA 2000 service Manual SER200

5.5 SERVICE LIFE

5.5.1 The SMA2000 jackets can stay in service indefinitely as long as the jacket continues to pass the periodic maintenance and inspection as specified in the SMA 2000 service manual.

Table 2

SMA2000 Life preserver Inspection Log

SERIAL No	Date Vl 1st year	Date Vl 2nd year	Date Vl 3rd year	Date Vl 4th year	5Year Service

VI = Visual Inpection