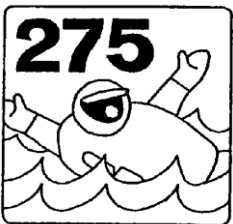


This PFD has been specifically designed
for the requirements of

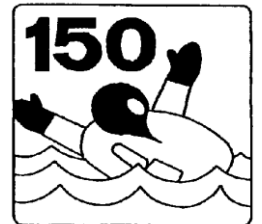
A.F.M.A



Manual /Automatic



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GENERAL DESCRIPTION

The Lifejacket is a unique Inflatable PFD, it is designed to be housed in an around the neck collar valise with adjustable waist belt.

Optional: The lifejacket can be attached to a mesh Vest with a zipper fastening at the front with sufficient adjustment as to be worn over wet weather clothing.

Optional: The lifejacket may incorporate a 3ltr SOS Hydration pack hands free personal hydration system, radio pouch and general cargo pocket on the rear and personal location beacon pocket and small cargo pockets on the front and crutch straps.

Our lifejackets have been designed with two operating systems, manual and automatic versions. Both are compatible so that you can upgrade from a manual to automatic. The wearer can also inflate the lifejacket via the oral inflation tube on the left-hand side.

The waist belt construction from 50mm webbing and features a stainless steel interlocking style buckle and D ring for attaching a lifeline.

The lifejacket has been designed to turn the body of a conscious or unconscious person face up at the correct angle of floatation with the mouth and nose held clear of the water in the minimum of time.

A solas flashing signal light has been fitted and is located on the front chest area. It is activated upon immersion in water and if necessary turned off during daylight hours.

SOLAS grade tape is located in a minimum of six (6) places on the upper side of the buoyancy chamber.

A pea-less whistle is provided for use in water.

1.0 OPERATOR INSTRUCTIONS

DONNING: Train yourself in the use of this Device:

It is *vital* the lifejacket is correctly adjusted to fit the user.

- 1.0.1 The lifejacket is donned in the conventional manner. The Vest if fitted uses a zipper fastening at the front and is then tightly secured to the body with an adjustable waist belt and a stainless steel interlocking style buckle and D ring for Safety Harness.
- 1.0.2 The lifejacket if fitted with crutch straps is passed between the wearer's legs and secured by side release buckles located to the wearer's right and left side on the waist strap. When not in use the crutch straps can be rolled up into a pocket in the back of the Vest and secured by touch tape in the Vest style only.

1.0.3 To prevent the lifejacket riding up on a wearer when in the water it is vital that straps are properly adjusted as this may prevent the wearer being able to maintain their nose or mouth face up above the water surface particularly if unconscious.

- 1) Don the PFD as a Vest, and if fitted do up zipper.
- 2) Do up waist belt and side waist tabs and **Tighten: Adjust belt again.**
- 3) Ensure red/yellow inflation lanyard is accessible.



1.0.4 Once the lifejacket has been donned and all adjustment straps have been done up firmly, the wearer is to check that the operating toggle is correctly exposed on the right hand side of the lifejacket.

1.0.5 Check that the operating toggle can be easily located, gripped and pulled for when activation is required.

1.1 MANUAL GAS INFLATION

1.1.1 Manual gas inflation is achieved by one hard pull on red/yellow toggle attached to the lanyard at the bottom right hand side of lifejacket.



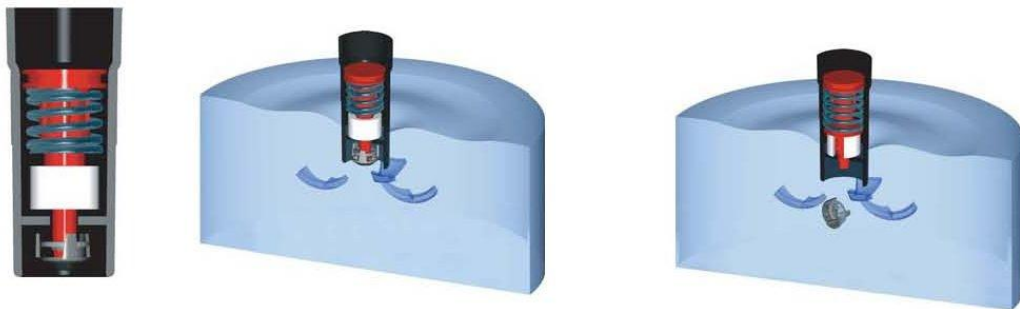
NOTE: Operating Toggle Instructions: In order to prevent accidental activation the toggle could be stored inside the lifejacket valise, however it is recommended that wearer is comfortable with this practise prior to use.

1.2 AUTOMATIC GAS INFLATION

1.2.1 Automatic Gas Inflation will occur when the lifejacket has been immersed in water. Pro-Sensor is fitted with the latest all weather cartridge with the added benefit of inhibiting the accidental ingress of moisture and water spray during hot humid or stormy weather should not activate the inflation system.



NOTE: Full performance may not be achieved using waterproof clothing or in other Circumstances.

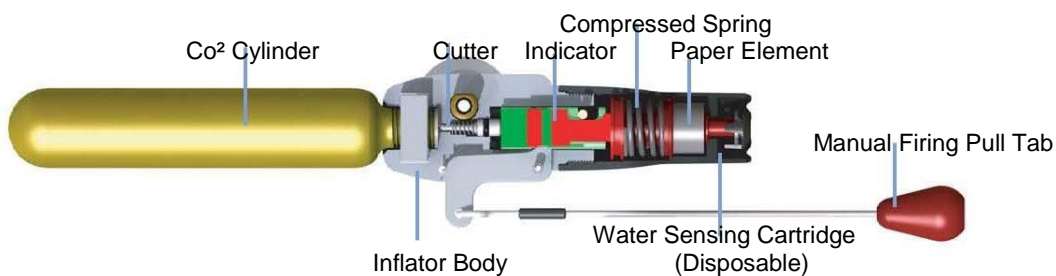


NOTE: If kept dry no service requirements for three (3) years on inflator cartridges from the date of manufacture.

1.2.2 The cartridge mechanism is a compressed high powered spring which is held by a paper element. When the paper element comes into contact with water it releases the spring which pushes a plunger forward.

1.2.3 The plunger forces the cutter into the Co² cylinder allowing the Co² to travel through the Co² gas hole in the inflator head and inflate the lifejacket.

1.2.4 Total buoyancy is normally reached in 4-5 seconds.



WARNING
This is not a PFD until fully inflated.

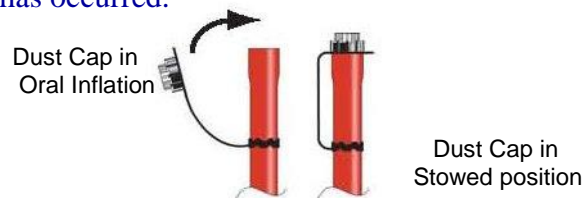
1.2.5 The automatic system is backed up by a manual override, which allows the user to pull the red lanyard and inflate the lifejacket.



Do not pull on the red lanyard unless the auto mechanism fails to operate.

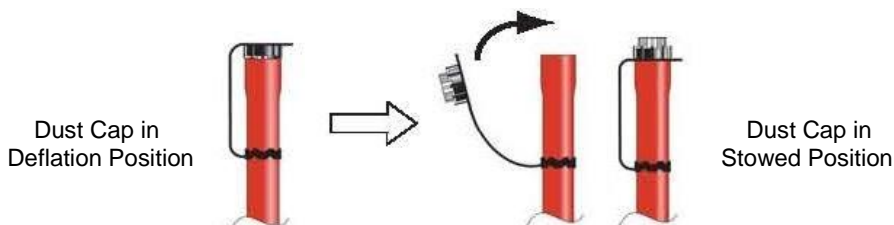
1.3 MANUAL ORAL INFLATION

1.3.1 Manual Oral inflation is achieved by locating the manual inflation tube on the left side of the lifejacket, removing the protective cap and blowing into the tube, take care not to over-inflate the buoyancy chamber. Use manual inflation to “top-up” the buoyancy chamber or to complete inflation after partial gas inflation has occurred.



1.4 DEFLATING THE LIFEJACKET AFTER USE

1.4.1 Reverse the valve cap on top of the oral inflation tube and insert into the non-return valve.



1.4.2 Squeeze lifejacket to expel all the residual air from the bladder.

1.4.3 The lifejacket has to be completely deflated to enable it to be folded flat.

1.4.4 Remove cap and replace in its (stowed) normal position.

1.4.5 Re-Arm your lifejacket.

WARNING
If the lifejacket has been inflated by the gas cylinder,
Take care not to inhale the expelled CO₂ gas.

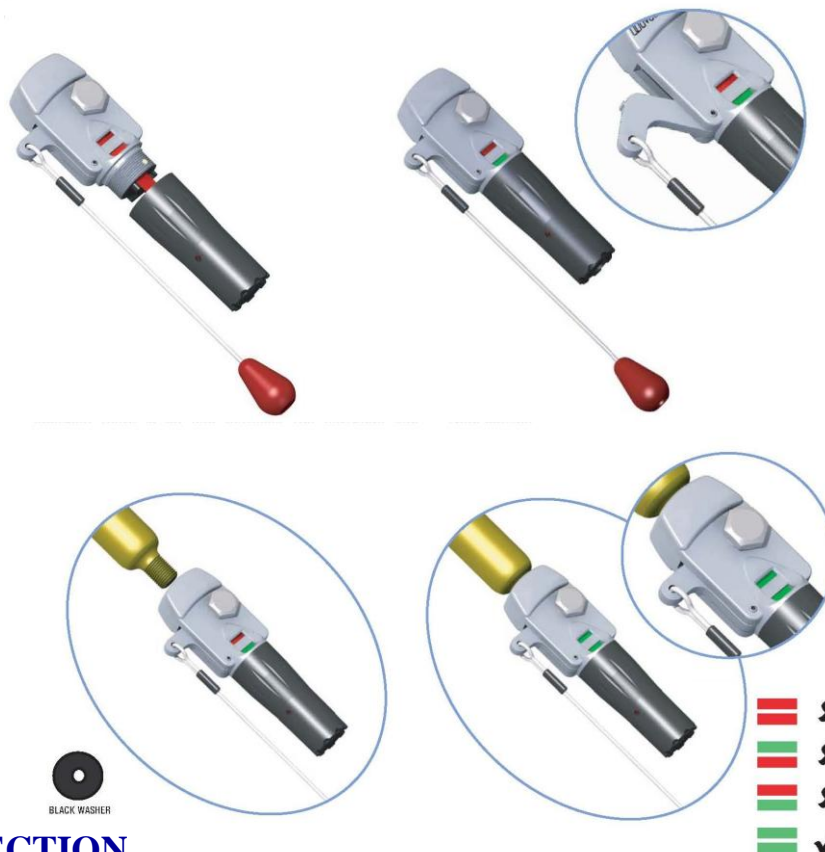


Before Re-Arming: Check that the cutter pin will drop below the rubber seating gasket and the expired sensor cartridge has been removed.

CAUTION
Do not use as a cushion.
Do not carry by Oral Inflation Tube

1.5 TO RE-ARM LIFEJACKET

Automatic Pro-Sensor firing mechanism (UML)



1.5.1 INSPECTION

- 1.5.1.1 Unscrew anti-clockwise and remove gas cylinder.
- 1.5.1.2 Unscrew anti-clockwise automatic inflator head cartridge, if fired replace it with a new cartridge. When replacing screw right up ensuring there is no gap between the cartridge and the inflator head and do up hand tight.
- 1.5.1.3 Examine the firing head and rubber gas seal and test its operation by pulling the manual inflation lanyard to see if the firing pin travels forward and both lever and pin return freely.
- 1.5.1.4 Manually replace the firing arm into the unit the arm will click into place there by **ensuring the firing lever is captured in the closed position.**

1.5.1.5 Fit a serviceable Co² cylinder-ensuring it has not been fired. Screw up tight into the firing head.

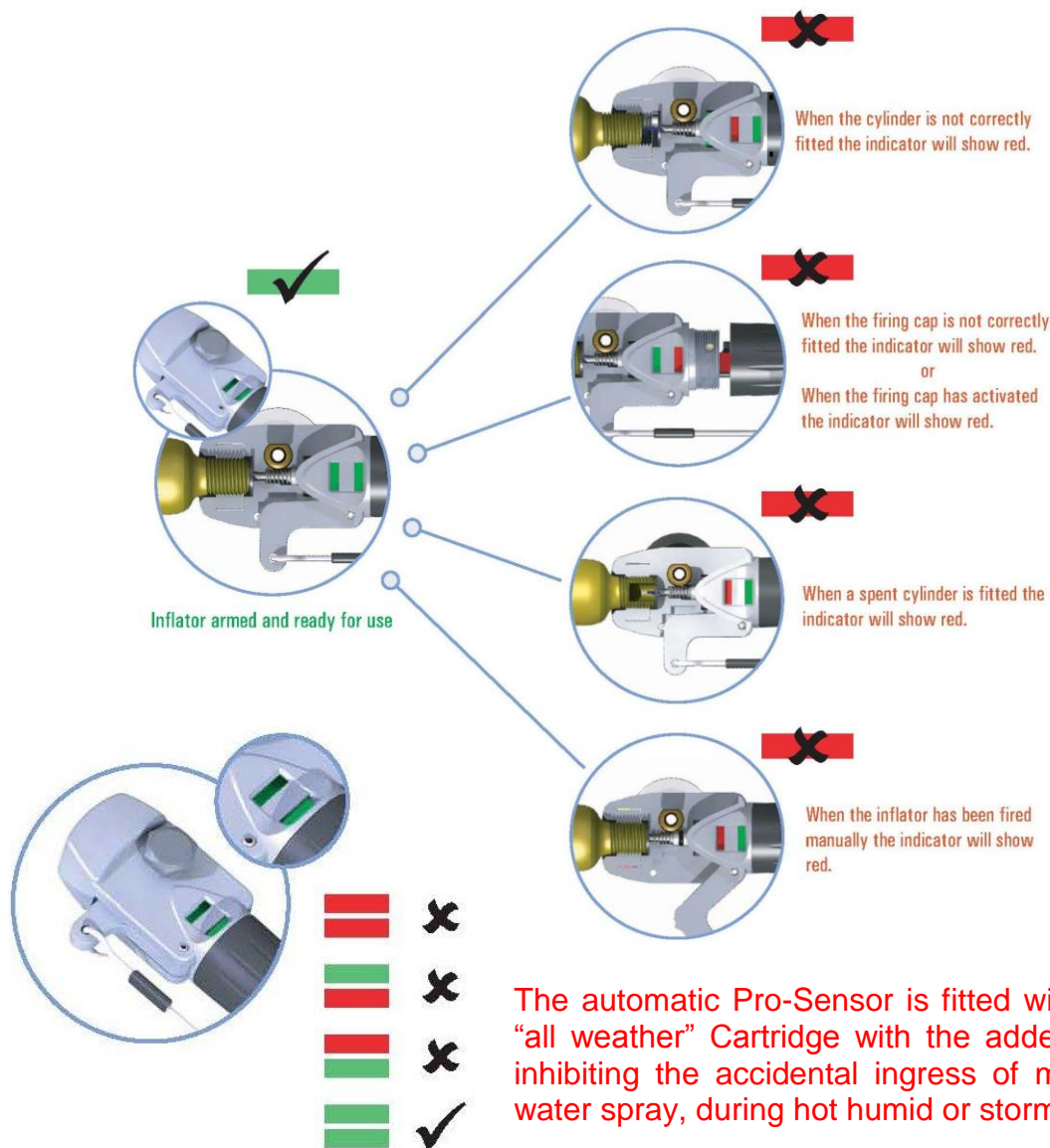
NOTE: The unit also provides the added benefit of detecting if the Co² cylinder has been pierced and the automatic cartridge has activated. The indicator sensor turns to **RED** eradicating the possibility of accidentally fitting a pierced gas cylinder or auto inflator cartridge.

1.6 OPERATIONAL

SERVICE INDICATOR:

GREEN Unit is Operational. **RED**  and Service Unit.

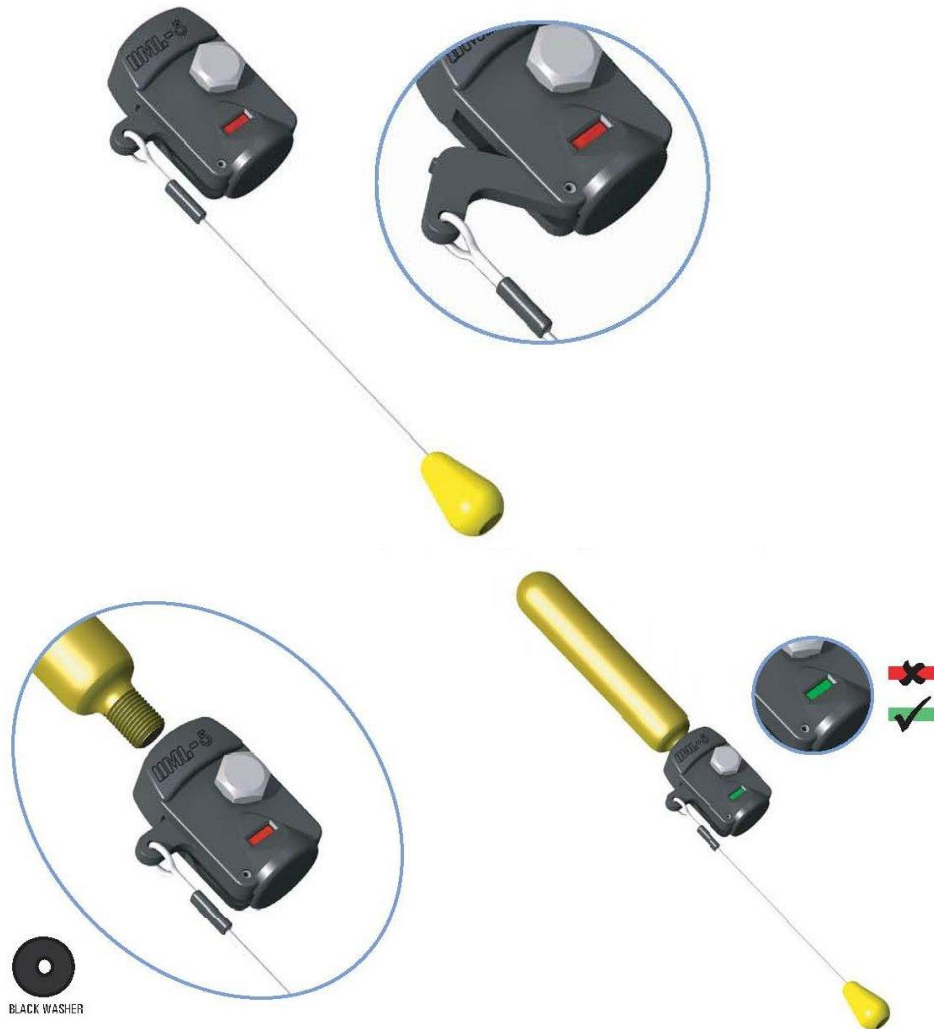
 The system will show  when the product is correctly changed.



 **Before Re-Arming:** Check that the cutter pin will drop below the rubber gas seating gasket.

1.7 TO RE-ARM LIFEJACKET

Manual Pro-Sensor firing mechanism (UML)



WARNING

This is not a PFD until fully inflated.

1.7.1 INSPECTION

1.7.1.1 Unscrew anti-clockwise and remove cylinder.

1.7.1.2 Examine the firing head and rubber gas seal and test its operation by pulling the manual inflation lanyard to see if the firing pin travels forward and both lever and pin returns freely.

1.7.1.3 Manually replace the firing arm into the unit the arm will click into place there by **ensuring the firing lever is captured in the closed position.**

1.7.1.4 Fit a serviceable Co² cylinder-**ensuring it has not been fired**, screw up tight into the firing head.

NOTE: The unit also provides the added benefit of detecting if the Co² cylinder has been pierced, eradicating the possibility of accidentally fitting a pierced gas cylinder the **RED** indicator will show.

1.8 OPERATIONAL

SERVICE INDICATOR:

GREEN Unit is Operational. **RED**  and Service Unit.



The system will show  when the product is correctly changed.



1.9 INSPECTION SERVICE

1.9.1 Check your lifejacket for signs of wear and abrasions.

1.9.2 Check straps webbing and stitching for signs of damage.

1.9.3 Remove gas cylinder and check seal is not pierced and that there is no sign of corrosion.

1.9.4 Check air-holding properties of the lifejacket by orally inflate until it assumes its normal shape (firm) and leaving overnight. If air loss does occur, return to SOS Marine or its agent for service.

1.9.5 Whilst the gas cylinder is removed, examine the firing head and rubber gas seal make shore when testing that the manual inflation lanyard returns freely and that it is in the closed position. Test its operation by pressing on the cutter pin to see if it travels freely, the unit sensor will show green when testing.

- 1.9.6 Inspect the light and battery for any signs of damage or cracking and ensure that the light is firmly attached to the buoyancy chamber. Check the expiry date stamp of the battery to ensure the light will be still serviceable by the next inspection period. If the battery will be “out of date” before the next inspection, discard and replace the battery.
- 1.9.7 The inflation cartridge must be replaced at the end of date expired on the cartridge or if “out of date” before the next inspection or when activated.
- 1.9.8 Replace gas cylinder-screw-up until tight.
- 1.9.9 Replace oral inflation cap.

2.0 WEBBING HARNESS AND FITTINGS.

Visual inspections before use:

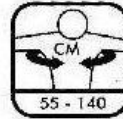
- 2.0.1 Inspect all webbing and components and attachment points for wear deterioration or contamination by oil's lubricants or other contaminating substances that may cause damage, check all metal fittings for signs of damage cracking, distortion and corrosion.

NOTE: If any doubt regarding the serviceability, it should be returned to **SOS Marine or its agent for assessment and or replaced.**

- 2.0.2 **WARNING:** The deck safety harness and safety line are intended to prevent the user falling overboard. They do not provide protection against falls from height.
- 2.0.3 **WARNING:** The deck safety harness and safety line may transmit very large forces. Only attach to strong Hooking Points or Jack-lines.
- 2.0.4 **WARNING:** Unless the deck safety harness is supplied with Automatic Tensioner, it is unsafe to wear this harness loose, the harness shall be worn tightly in order to be effective.”

2.1 TECHNICAL DATA (Bladder Assembly)

- 2.1.1 Personal Application:



- 2.1.2 LEVEL 275: Made to comply: ISO 12402-2
For Offshore, extreme conditions, special protective clothing heavy equipment.
- 2.1.3 LEVEL 150: Made to comply: ISO 12402-3
For Offshore, foul weather clothing coastal conditions.
- 2.1.4 Harness and Safety line D Ring attachment the following products conforming to ISO 1240I: 2009 Notified Body No 0514

- 2.1.5 Bladder Spanish yellow 210 Denier Nylon single-side polyurethane coated air and water with ultraviolet resistance. All seams and fitting points are high-frequency welded and air tight.
- 2.1.6 SOLAS LIGHT AND BATTERY:
Water-activated flashing light with manual override.
Rescue Dan W-1 (Turn anti-clockwise for off in daylight hours)
Type: Daniamant Light
Weight: 90grammes Visibility: 2.2km
Duration: 8 hours Battery Life: 5 years
- 2.1.7 SOLAS grade reflective tape is located in a minimum of six (6) places on the upper side of the buoyancy chamber and if fitted two (2) places on the hood.
- 2.1.8 Lifeline and Toggle.
- 2.1.9 Waist Belt lifting strop.
- 2.1.10 A pea-less whistle is provided for use in water.
- 2.1.11 Weight includes bottle approx. 700gm to 2300gm.
- 2.1.12 Jaguar Oral inflation Valve 4½ - 6 ½” Red.
- 2.1.13 United Moulders Limited Fittings.
(Fit only UML fittings to Bladders marked UML)
Automatic/Manual Inflation System is United Moulding Limited:
Manifold Brass UMO 1655/A
Automatic Pro Sensor Inflator Valve ½
Automatic Pro Sensor Inflator Cartridge
Manual Pro Sensor Inflator Valve ½
- 2.1.14 Manual gas inflation only lifejackets are special purpose, marked in accordance with ISO 12402-6
- 2.1.15 Co² Cylinders: 33 or 60 gram disposable cylinder operating mechanism.

NOTE: Fit only cylinders that the weight is compatible with the weight indicated on the lifejacket. The gas weight of the cylinder to be fitted is stencilled on the front of the buoyancy chamber directly below the operating head.

WARNING
Gas cylinders are dangerous goods and to be kept away from children.
Gas cylinders are not to be misused.

2.2 TWELVE MONTHLY SERVICE

2.2.1 The PFD component of this lifejacket should be serviced a minimum of once every twelve (12) months. Return the PFD lifejacket to SOS Marine or its agent for complete and authorised annual servicing and repairs.

NOTE: It is recommended that lifejackets that are continuously in use are to be inspected from initial issue and checked for serviceability every six (6) months.

The point of contact for service bookings is Ron Smith Email: ron@sosmarine.com.au

2.3 CLEANING AFTER IMMERSION IN SALT WATER

NOTE: Hand Wash (ONLY)



2.3.1 After immersion in salt water the lifejacket assembly must be rinsed in fresh water. Avoid water ingress into oral inflation tube and the inflation manifold when cleaning.

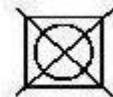
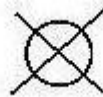
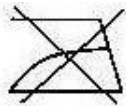
2.3.2 When cleaning always remove the automatic inflation cartridge and Co² cylinder before rinsing.

2.3.3 Oil and stains should be removed by washing with acid-free soap and rinsed thoroughly in fresh water.

2.3.4 Allow to dry naturally. (Keep out of direct sunlight)

NOTE: Under no circumstances should you try to repair a lifejacket yourself, if you are in any doubt regarding the serviceability of your lifejacket it should either be replaced or returned for testing and repair.

DO NOT



CAUTION

DO NOT wash in washing machine or spin or tumble dry.
DO NOT use other than recommended solvents or cleaning agents

NOTE: When lifejacket assembly is completely dry it must be subjected to the full maintenance procedure.

2.4 STORAGE

2.4.1 Store the lifejacket in a dry, well ventilated area. It must not be subjected to extremes of temperature above + 60°C or below -30°C. Do not expose the lifejacket to bright sunlight for extended periods when not in use.

- 2.4.2 It should not be stored in compressed or cramped conditions which may cause damage or deterioration. It is crucial that the lifejacket is folded correctly at all times when not in use in order to protect the internal components.
- 2.4.3 If the storage conditions are met, the lifejacket can remain in storage between maintenance periods.

2.5 PREPARATION PRIOR TO REPACKING

- 2.5.1 No PFD inflatable component shall be repacked into its' valise until a full inspection has been carried out.
- 2.5.2 When the PFDs inflatable buoyancy component has been deemed serviceable complete the following operations.

2.6 REPACKING INSTRUCTIONS

NOTE: Incorrect packing, fitting of incorrect components may result in failure to operate or inflate properly.

- 2.6.1 Extract air/gas by squeezing out all residual air from the bladder or with vacuum pump, until the bladder is flat and crinkled, via the depressed valve in the oral inflation tube.
- 2.6.2 Pull the buoyancy into shape, by laying it out face up on packing bench.
- 2.6.3 Before re-packing inspect to ensure Co² cylinder and automatic/manual valve-cap are set up for operations.
- 2.6.4 Fold (i.e. Pleat) the deflated bladder starting at the sides and fold inwards to the width of the valise, fold the bladder with the inflation valve toggle line facing outwards when making the narrow pleats and that the whistle is in place then insert it into the side of the valise, closing the Velcro strips of the valise together.
- 2.6.5 Ensure the manual operating head toggle is protruding fully from the valise, approximately 150mm up from the bottom of the lobe on the wearer's right hand side.
- 2.6.6 Perform the same action with the opposite side of the inwards to the width of the valise, fold the bladder with the light facing outwards and oral valve into a narrow pleat making sure that the lifting loop is in place and fastened, then insert it into the side of the valise, closing the Velcro strips of the valise together.
- 2.6.7 Fold (i.e. pleat) the top of the bladder into the top of the valise collar, fasten the hook and loop strips together, then pleat each side of the top of the bladder, closing the Velcro strips of the valise together.

APPENDIX

1.0 SPARE PARTS

1.0.1 Cylinder 33 gram

33gm cylinder should be regularly checked and tightly fitted into inflator.

Product Number: SOS-5100-1

NSN-4220 66-101-9423



1.0.2 Replacement O Ring gasket set Top/Bottom

Consists of two replacement rubber O ring gasket for Use in the servicing and refurbishment of the Auto/Manual Inflation mechanism.

Product Number SOS-5100-21



1.0.3 Cylinders 60 gram

60 gm cylinder should be regularly checked and tightly Fitted into inflator

Product Number SOS-5259



1.0.4 Manual inflation Tube Cap

Replacement protective and valve operating cap for the manual inflation tube.

Product Number: SOS-5100-7



1.0.5 Auto inflation head UML, complete

Replacement of automatic inflation mechanism

IMPORTANT: This inflator can ONLY be fitted to bladders marked (UML)

Product Number: SOS-6101



1.0.6 S.O.S Marine Hydrpac

Hands free hydration system that can be incorporated into the S.O.S Marine PFD Vest. It has a capacity of 3 litres and comes complete with tube and mouth piece.

Product Number: SOS-5067

NSN: 8465 66-148-7876



1.0.7 Water Activated SOLAS Flashing Light (Optional)
 The SOLAS light is activated upon immersion in water and can be turned off during daylight
 Product Number SOS-5100-4



1.0.8 Manual Inflation Mechanism
 Replacement of manual inflation mechanism
IMPORTANT: This inflator can **ONLY** be fitted to bladders marked (UML)
 Product Number: SOS-6102




1.0.9 Automatic Inflation Bobbin
 Replacement water sensing cartridge trigger for all UML Automatic Inflation lifejackets
 Product Number: SOS-6100-2



Getting familiar with your Lifejacket and Inflator

Testing your Lifejacket

- If you want to test your lifejacket in the water, open the lifejacket and follow the manufactures instructions.
- Manual lifejackets remove the Co² cylinder from the inflator.
- Automatic lifejackets remove the automatic cartridge and Co² cylinders from the inflator.
- Don the lifejacket, following the manufactures instructions.
- Inflate the lifejackets through the oral inflation tube until firm.
- Go swimming, if you are not a competent swimmer ensure the test is performed in safe shallow waters.
- Have help at hand, familiarise yourself with the way you float when wearing the lifejacket
- After your swim, allow the lifejacket to dry naturally (keep out of direct sunlight).
- When completely dry deflate. (Procedure will be in accordance with the technical manual.
- Replace the Co² cylinder and automatic inflation cartridge.

The sensor will show  when the inflator is correctly changed. (see rearming your Lifejacket)



MANUAL



AUTOMATIC