

Lifejacket Quick Service Guide

DURO SOLAS and DURO SOLAS +



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Registered design EC + US Patent No. 7631728

www.spinlock.co.uk



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If you need any assistance with servicing please contact
rob.holland@spinlock.co.uk



Issue Ammendments

- 2: Added new Pylon light text
- 3: Revised MOB1 fitting instructions added
- 4: Bladder Attachments changed
- 5: Addition of SOLAS + Harness model
 - Rear harness fitting instructions for SOLAS +



IMPORTANT LEGAL NOTICE
REGARDING USE OF DECKVEST SERVICE MANUAL

1. This Approved Service Manual ("Services Manual") is for use only by those persons at an Approved Deckvest Service Centre ("Service Centre") who have completed the appropriate Deckvest service training provided by Spinlock Ltd ("Spinlock") or one of its appointed training representatives ("Service Trainer").
2. Servicing of a Deckvest life-jacket may only be undertaken by Spinlock or a person who has received service training by Spinlock or a Service Trainer.
3. The procedures set out in this Service Manual must be followed in order to ensure the proper and safe functioning of the Deckvest life-jacket. If the procedures set out in this Service Manual are not properly followed and carried out there is a risk of accident or death.
4. It is the sole responsibility of the Service Centre to ensure that the service of the Deckvest lifejacket is carried out fully in compliance with the procedures set out in this Service Manual and in accordance with the training that they have received.
5. The signature or stamp of or on behalf of the Service Centre on a Deckvest Service Sheet shall be deemed to be the Service Centre's acknowledgment and confirmation that the service of the Deckvest life-jacket has been carried out in accordance with this Service Manual and the relevant service training.
6. Spinlock Limited (and its agents) reserves the right (but without accepting any obligation to audit the procedures being followed by a Service Centre to ensure adequate standards and compliance with this Service Manual.
7. Save for death or personal injury caused by the negligence of Spinlock or its employees for whom it is liable, the Service Centre indemnifies and keeps indemnified Spinlock Ltd against any claims demand proceedings liabilities damages or costs (including professional costs) incurred by Spinlock directly or indirectly as a result of or in connection with any failure by it or any of its employees or agents to comply with this Service Manual and the relevant service training.
8. Save for death or personal injury caused by the negligence of Spinlock or its employees for whom it is liable, Spinlock shall have no liability to any person, company or other organisation whether in contract, tort, negligence breach of statutory duty or otherwise for any loss damage harm costs or expenses of any nature whatsoever incurred or suffered by such person, company or other organisation arising from or in connection with any error in or omission from this Service Manual or the service training provided by it.
9. The contents of the Service Manual (including this notice) are governed in all respect by the laws of England and the Service Centre or any other user of this Service Manual consent and submit to the jurisdiction of the courts of England in respect of any dispute or matter arising from or in connection with this Service Manual or the service training provided by Spinlock.





OPTIONAL

AIS
MOB1
UNIT



PYLON™
LIFEJACKET
LIGHT
FITTED



OPTIONAL

SPRAY
HOOD



SHOULDER
FIT SYSTEM



INTEGRATES
WITH MOST
FALL ARREST
HARNESSES



DUAL
MANUAL
ACTIVATION
HANDLES



EXTRA
DURABLE COVER
MATERIALS



HIGHLY
VISIBLE
RED LIFTING
STRAP



LUME-ON™ LIFEJACKET
ILLUMINATION
LIGHTS

OPTIONAL



COMPATIBLE
WITH PRO-TECH
PROTECTIVE COVER

OPTIONAL



DUAL ORAL
INFLATION
TUBES &
WHISTLE



ID / ASSET
TRACK
POCKET



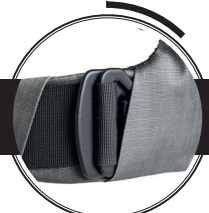
2 x MK5i
FIRING
HEADS



FRONT OPENING
HEAVY-DUTY
BUCKLE (SOLAS)



COVERED
QUICK-BURST
ZIP



SMOOTH
BODY ADJUSTER
SYSTEM



SOFT LOOP
DECK HARNESS
ATTACHMENT POINT



ISO12402-1
INTEGRATED
DECK HARNESS



WIDE
CROTCH
STRAP

NEW SOLAS+ WITH DECK HARNESS

Service Station Requirements

Operations

Must be an established Lifejacket or Life-raft service station already or be approved by a relevant National body or have the relevant experience.

Trained and qualified staff must be available to undertake training from a Spinlock representative.

Commit to give full contact details to Spinlock and ensure that they are registered in the service area of www.spinlock.co.uk/service

Commit to checking Spinlock site for latest information once every 6 months and be available for auditing at Spinlock's request.

Jackets over 10 years old should not be serviced.

Facilities

Dedicated area and management system in place to manage the Service and record and file relevant details.

Have the correct and calibrated tools. These can be ordered from Spinlock if required.

Torque driver



DW-SV1

Digital scales



DW-SV2

Adaptor



DW-SV3

Process

Follow servicing steps as outlined in this document or the latest copy available to download from www.spinlock.co.uk/service

Complete the service log on service label or on the internal label.

Complete service certificate with approval stamp.

More copies can be downloaded from www.spinlock.co.uk/service



Through Life Support Programme

Spinlock require all life jackets to be registered to benefit from the security of our Through Life Support Programme.

Please ensure customers register their Deckvests online at www.spinlock.co.uk/en/supports/register

Servicing steps

1: Harness and cover

Check all stitching for signs of wear or damage:

Key stitching is in contrasting colours and located on the front of the harness.

Obvious damage, contamination or loose threads will make the harness unsafe.

Webbing:

Check for damage especially to the edge of the webbing and ensure the buckles are not bent or damaged.

If the buckles are damaged the harness will need to be replaced (contact Spinlock).

SOLAS +

Check Harness loop and bartacks on rear



Materials:

Check all materials for obvious damage, general wear should not be a problem.

If the damage can not be repaired by a simple patch, then the cover will need to be replaced. If you are concerned about the affect of the repair on the functionality of the Deckvest contact Spinlock.

Zip:

Open the jacket fully by the yellow break section on the zip.

Check internal sewing especially the connection points for the bladder.

Seperate the zip and run the slider back to the start on the opposite side.

If there is damage to the teeth of the zip then the cover will need to be replaced (contact Spinlock).

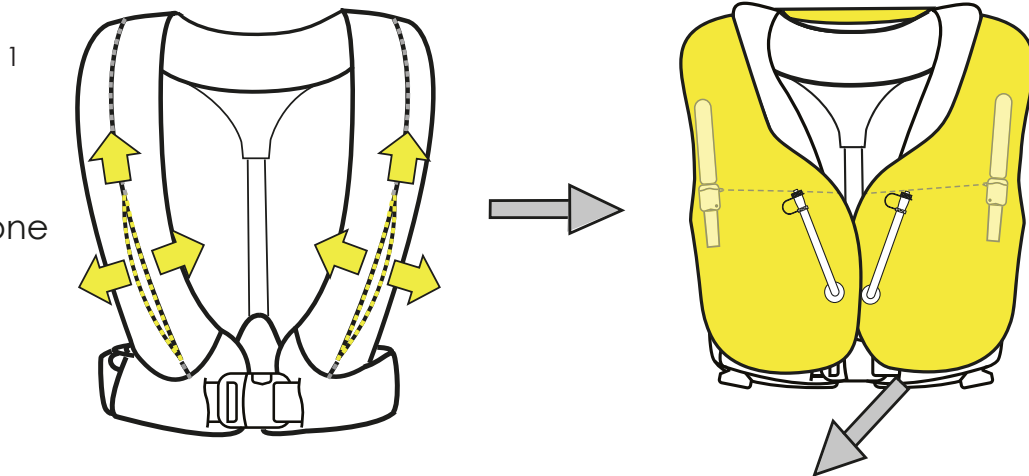
If the zip puller is damaged or missing, this can be replaced see section 7.



2: Quick Burst Zip Information

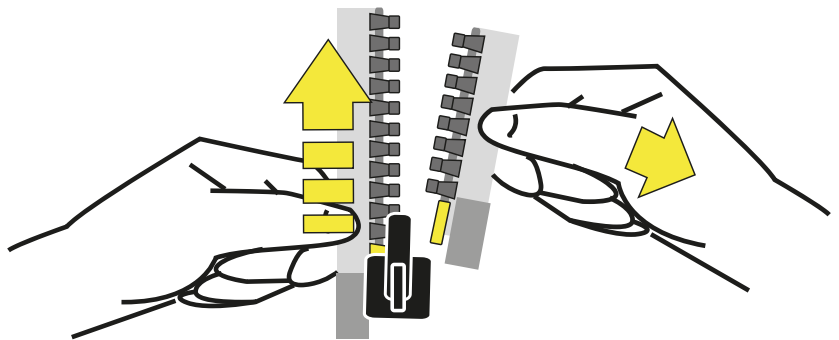
A B C D

Open zip at one of the break out points



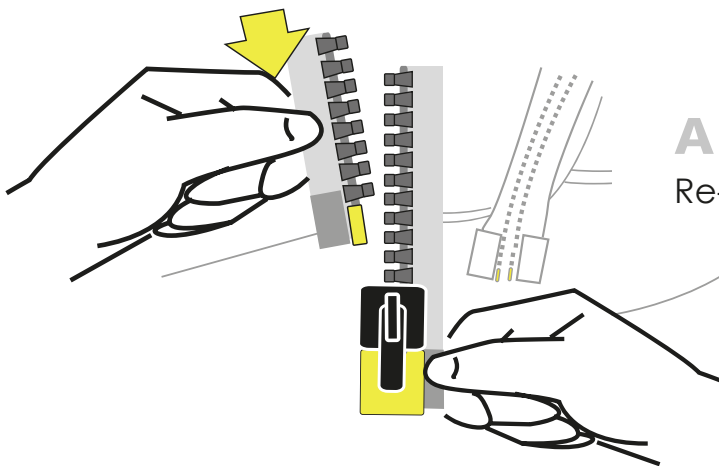
A B C D

Run slider round to wearers right side.



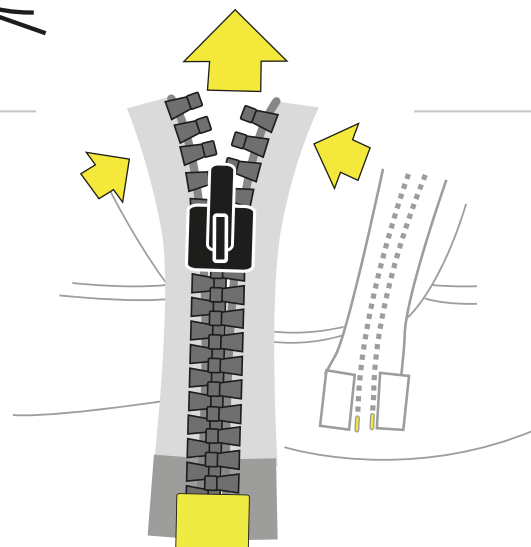
A B C D

Re-attach zips.



A B C D

Start running zip back round to close.

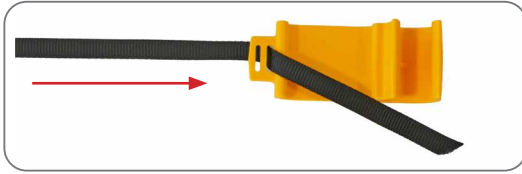


Deckvest Fitted with Ocean Signal MOB 1 AIS Device

For Spinlock DURO SOLAS Lifejacket (DW-SLS/A)

Fitting kit supplied with MOB 1 or with part number DW-MOB/RELEASEKIT

- 1 Thread ribbon end through oral tube bracket



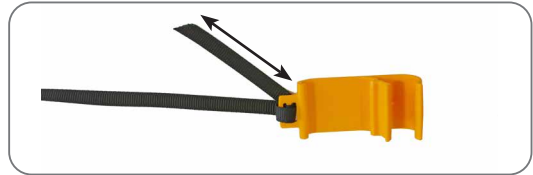
- 2 Thread back up through second hole towards outer edge



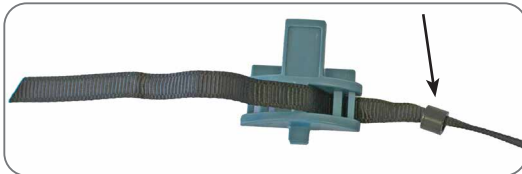
- 3 Thread back through inside hole



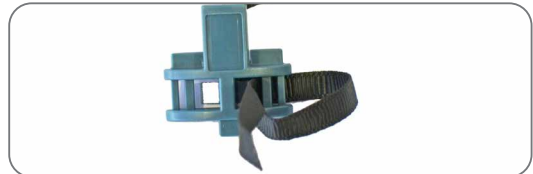
- 4 Leave 60mm on tail from end of plastic



- 5 Slide toggle on to ribbon and pass ribbon through inside hole on grey plastic activation slider



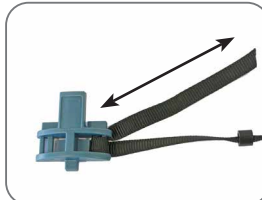
- 6 Wrap round and pass through inside hole again



- 7 Pass ribbon through outer hole



- 8 Leave roughly 30mm of tail.



- 9 Length of ribbon should measure between 27 - 30cm



- 10 Slide tail through toggle



- 11 Wind in antenna and attach activation slider to the MOB1



- 12 Place toggle into gap on slider and fold the tape back over the toggle



- 13 Attach plastic cap to MOB 1 unit



- 14 Slide whistle holder over oral tube, and then slide MOB 1 elastic over the top.



- 15 Pass oral tube bracket and ribbon under cylinder between elastic retainer and manifold. Ribbon should pass between cylinder and retainer plastic as per picture B. Attach oral tube bracket MOB 1. Ensure that this gives a direct lead for the release ribbon around the jacket. For some older style jackets the ribbon will need to run above the elastic to give a straighter direction of pull



- 16 Pass MOB 1 unit through elastic on oral tube

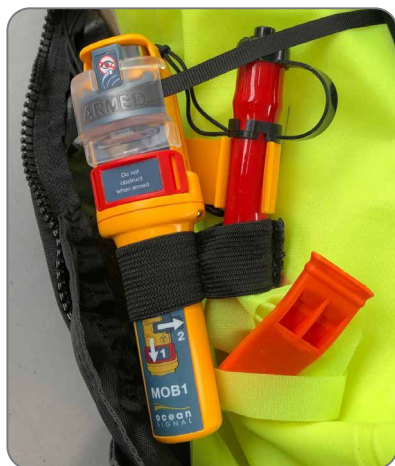


Note
When fitting the beacon in the elastic it can be simpler if elastic is removed from oral tube first, swapped around so that the the wider hole can be used for the beacon.

- 17 Attach the lanyard cord and pass the cord over and then underneath the oral tube bracket

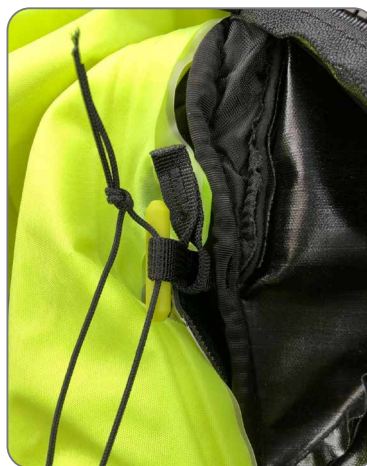


- 18 Attach the MOB1 Oral Tube bracket to the oral tube. Check ribbon is not caught around cylinder, oral tube or whistle.

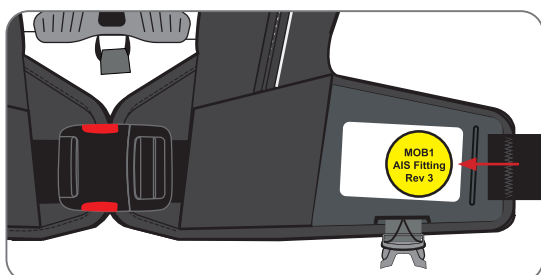


Fit O-Ring to oral tube bracket

- 19 Secure MOB 1 cord to bladder toggle webbing to ensure unit is always attached to Deckvest. Cord should be placed above MOB 1 unit.



- 20 Add MOB 1 rev 3 fitted sticker inside the ID window.



Note- Buddy line should be packed to the side
If the buddy strap is attached to this tube it can be removed and placed in the folds of the lifejacket



3: Inflation Test

Must be conducted in a controlled service area to ensure no damage to the bladder, and kept at stable temperature.

The Deckvest SOLAS has twin chambers so the below process will need to be repeated for each chamber

- A. Remove cylinders and firing caps.
Inflate one chamber of the bladder first through the oral tube with clean dry air (airline or similar) until firm and lobes are touching. Approx 2 psi (14 kPa). Any more and the air will escape from the relief valve.
 - B. Leave cap off the oral tube whilst testing.
 - C. Measure pressure at beginning of the test and again 6 hours later in a temperature stable environment.
- If more than a slight softening (approx. 10%) the bladder must be replaced.
- D. Remove air from the bladder using suction - do not squeeze or crush bladder.
 - E. Inflate second chamber of bladder and repeat process



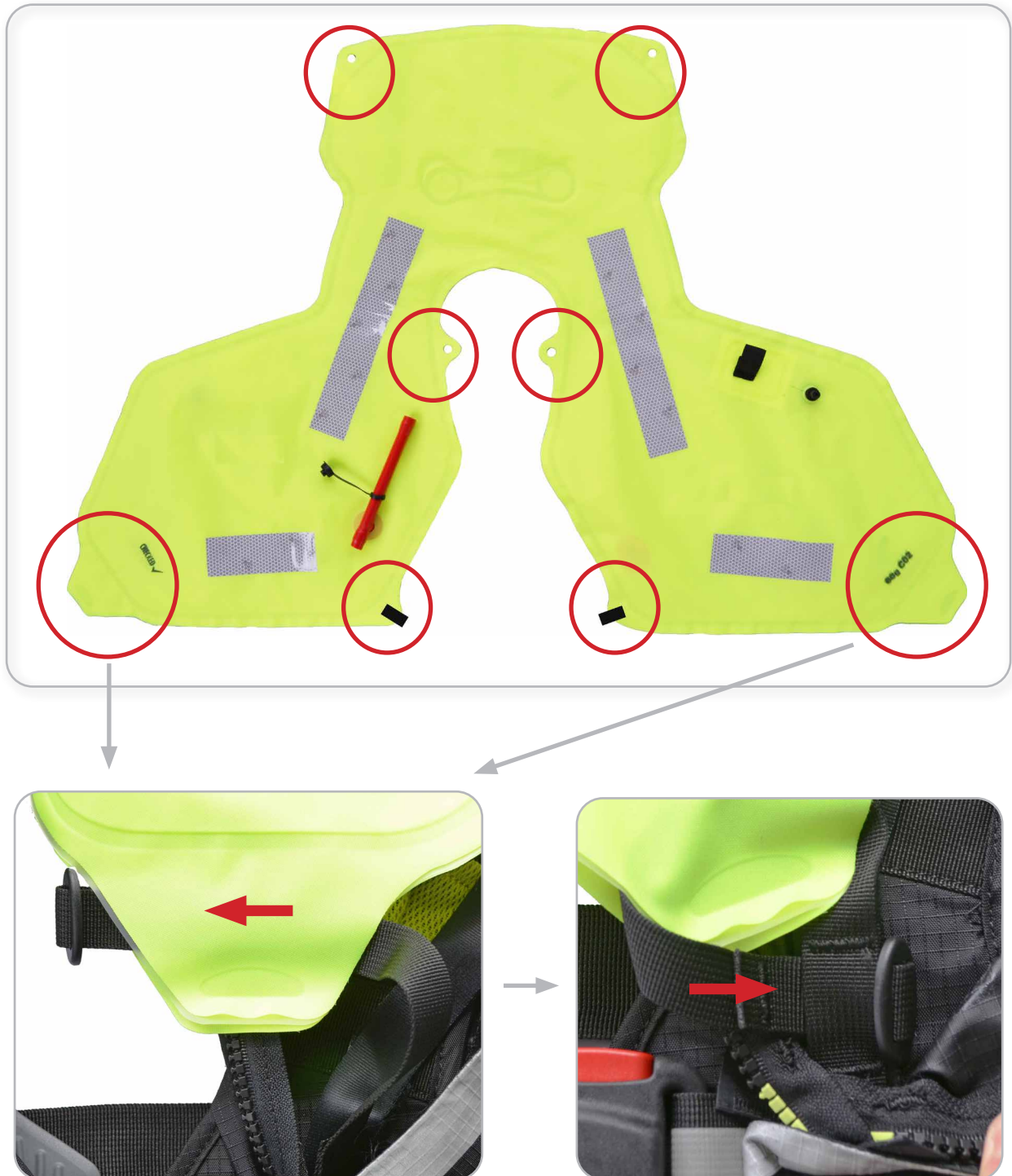
If the Bladder is damaged, it is possible to replace it (See page 8) .

Note - Some bladders have two oral tubes with over pressure valves and some will only use one.

3.1: Bladder Replacement

A.
Check the 8 attachment points for any signs of wear or tears in holes.

If the bladder needs replacing follow the procedures below



Replacement Bladder - DW-BLD/SL5

Replacement firing unit - DW-UMK5

B.
Pass bladder through Pylon strap

Note:

For models with retainer straps

Do not pass bladder through the straps
across the yellow zip teeth section
These sit underneath the bladder



Retainer straps on some models

C.
Attach the bladder by passing the toggle through
the webbing loop or hole on the bottom and the
bladder hole on the top.

Make sure toggle webbing is not twisted and
toggles are sitting square on the bladder

Toggle should sit flush to fabric and no webbing
should be left through hole



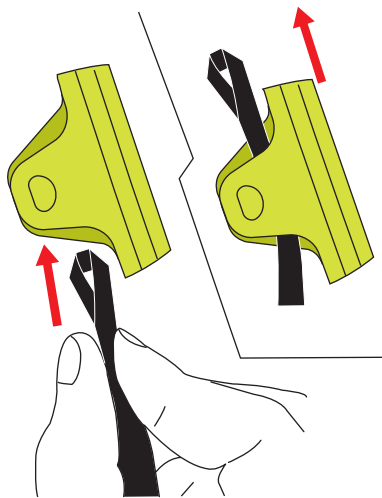
D.
Attach the bladder to the back



SOLAS Bladders with Torpedo Toggle Replacements

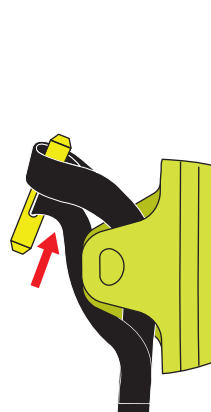


1

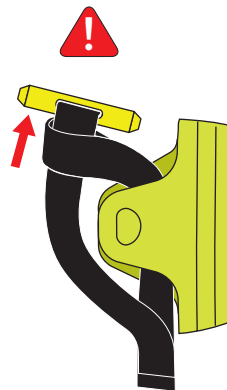


Pass loop through bladder
and push all the way
through

2



Push toggle
through loop



Pull loop over
toggle and check
it is secure



Replacement Bladder - DW-BLD/SLS/2



Replacement firing unit - DW-UMK5

3.2: Components for the UML Mk5 automatic firing head

Firing Mechanism - Deckvest SOLAS is automatic and uses the UML MK5:



Attaches to plastic round manifold



Uses a TX30 Torx Bolt
A Torx adapter will be required to tighten the unit to 3nm



Plastic torx head cover placed over torx bolt

DW-UMK5 - Replacement MK5 Unit

DW SV4 - Replacement D Post O Ring

Each Automatic capsule is stamped with an expiry date (see www.uml.co.uk for full details).

The automatic capsule has an indicator to show if it is still armed, this may be green or black, and is released once the head has been fired.

To remove the automatic cartridge, unscrew in an anti clockwise direction.



Active



Used



1. Check that there is no damage to the two manual lanyards and handles.



2. Ensure that the cutting pin moves freely in the body.

Up

Down



3. Ensure that the cylinder sealing gasket or O ring is in place.



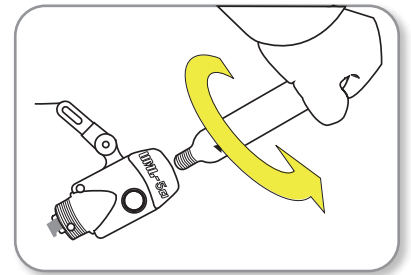
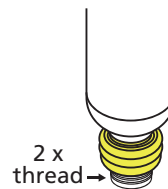
DW SV06 - Replacement Cylinder O Ring for yellow UML Mk5

Cylinders

60g CO₂ cylinder 275N

Unscrew the cylinder anti-clockwise to remove it

If yellow retainer is fitted replace on service.



Check cylinders seals have not been slightly weakened at the end by unintentionally pulling the manual handle. This could cause the cylinder to release during temperate changes.

Add a strike mark on the cylinder to show it has been checked



Check for corrosion

If the cylinder has slight corrosion as per fig. 1 it should be replaced to stop further spreading and damage to the bladder.



Fig. 1

Check labelling on side to ensure it is correct gas and specification

60g for 275N

Check total weight against specification stamped on the bottle.



3.3: Components

Oral tube

Check that the bladder can be inflated through the oral tubes and that there is no debris in the tube.



Sprayhood

If fitted check attachments are secure and that there is no damage to the window

Replacement DW-SHD/SLS

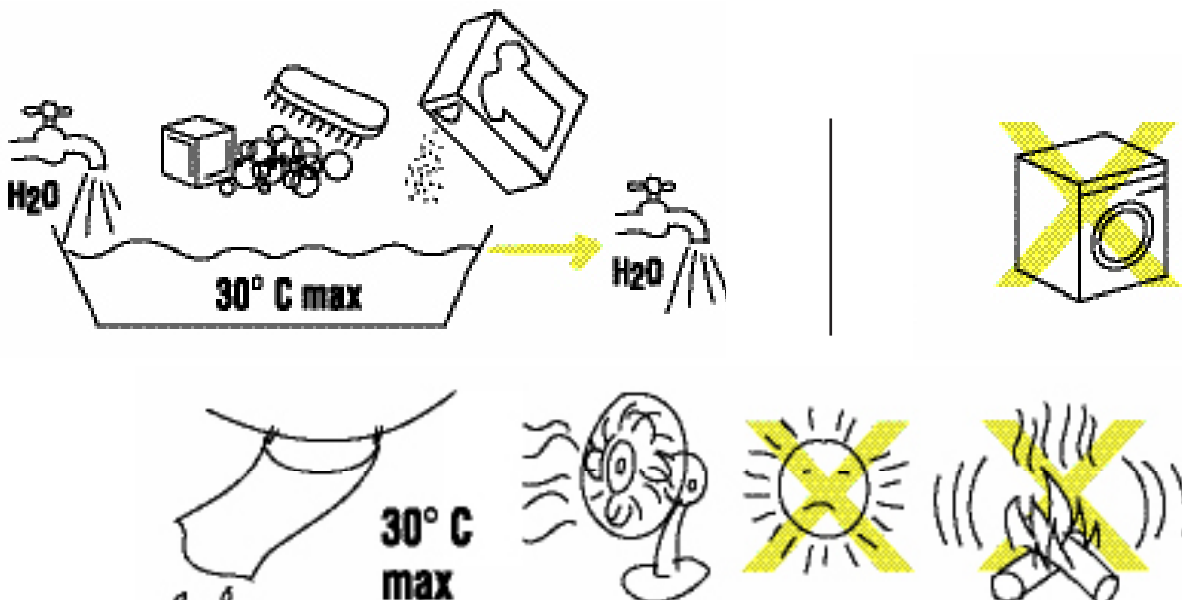
1. Thread webbing through buckle at the back of neck
2. Thread webbing back through to secure



4: Cleaning

If the product requires cleaning, remove cylinder and automatic components and clean by hand. Wash with mild detergent, Rinse in clean water maximum temperature 30 degrees. Dry in a ventilated area away from direct sunlight or heat. Avoid use of solvents or strong chemicals which could damage the components.

The bladder can be removed and the cover section washed separately



5: Re-attaching components and arming the lifejacket

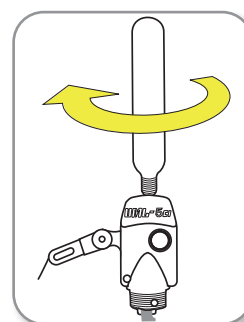
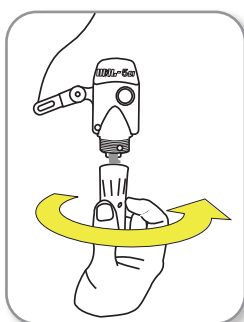
1. Check that the firing mechanism is tightend to the manifold with a force of 3nm using a calibrated tool.

To replace the parts you will need: 2 x DW-RAK/275

2. Take a new automatic cartridge, (ensure that the expiry date is a minimum 2 years away) and screw on to the inflator head in a clockwise direction.

Screw on tight ensuring there is no gap between the cartridge and the inflator.

3. Check that the cylinder sealing gasket or O ring is correctly fitted and screw in the new cylinder in a clockwise direction.



The Cylinder must be tightened firmly by hand to ensure that it will not work loose

If a cylinder retainer is fitted re-attach



On the Mk5 heads replace the green retaining clip over the firing arm

4. Ensure cap is on the Oral inflation tube, the whistle and light are in place and that the Sprayhood is securely attached.

Complete service log on the bladder or in the label with a permanent waterproof pen. Show the date that the service was completed. The date can also be written on the white label on the harness belt at the customers request.



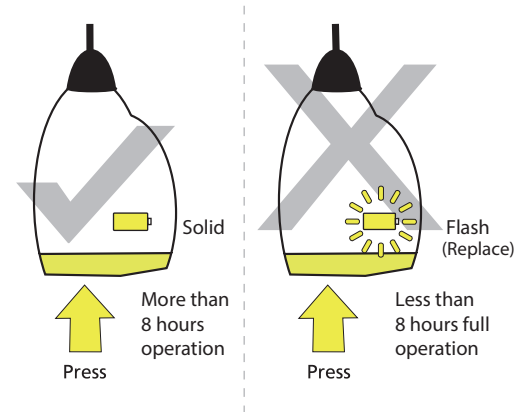
6: Pylon

Battery test feature on 2016 Pylons

Press the test button once

There will be solid flash to show the battery has enough power

A flashing light will show the battery is low and the Pylon should be replaced



Pylons from 2019 do not have the battery test feature.
To test, press and hold the button and the main light will flash.

2. Check the light functions

Press and hold the test button for 3 seconds until the light flashes

Press and hold the test button for 3 seconds to switch off

Pylon will automatically switch off when button is not pressed



3. Replacement light for all Deckvest Models: DW- PY/L1

Take the Pylon stalk and place through the strap hole

Pull the stalk through and attach the stalk bottom to the strap

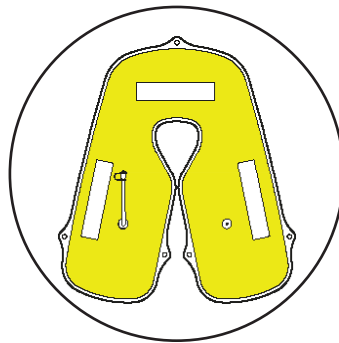
Pylon stalk needs to curve inwards (Spinlock Logo on the outside)



- \\ Lume-On™ lifejacket illumination lights are water activated. Check they function by using a damp sponge.
- \\ LED lights use the lifejacket bladder as a diffuser to increase visibility.
- \\ Battery life - minimum 2 hours flashing at full intensity.
- \\ The 2 lights bond directly onto the underside of the inflatable part of your lifejacket.
- \\ Lifejacket and bladder must be thoroughly dry before attaching the Lume-On™ or the stickers will not bond.
- \\ If attaching to a used lifejacket, wipe the bladder area for attachment with a damp cloth and leave to dry. Salt and other contaminants will affect adhesion.



1. Unpack your lifejacket following manufacturer's instructions.



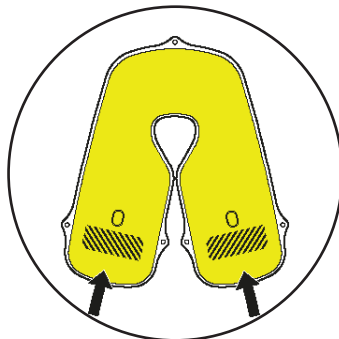
2. Lay the inflatable bladder on a table, as flat as possible.



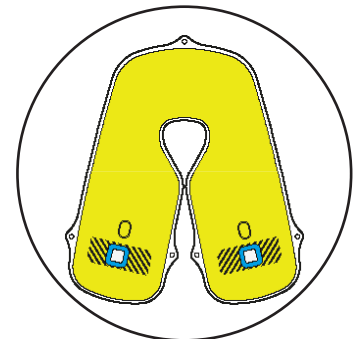
3. Peel the sticker from a Lume-On™.



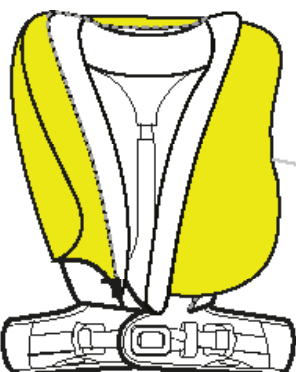
4. Turn the bladder over, you do NOT need to remove the bladder from lifejacket.



5. Stick each Lume-On™ to the bottom of the back of the bladder lobe, in the area pictured. Press firmly.



6. Ensure the positioning will not affect the packing of your bladder. Repeat process for the other side.



6. If possible, leave lifejacket flat and unpacked for 24hrs to ensure full bonding of the stickers.

Repack the lifejacket following manufacturer's instructions.

Lume-On™ positioning on other lifejacket brands may vary. For best results inflate the lifejacket using the oral tube and position at the bottom of each chamber where the lobe would be in the water. See the video for more information.

7: Zip Replacement

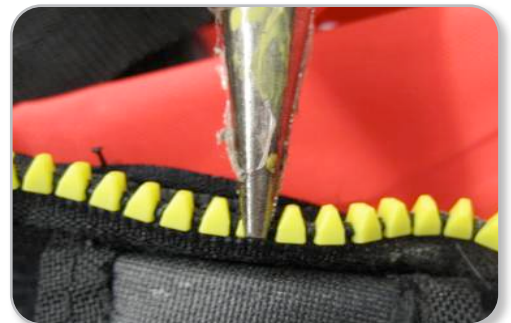
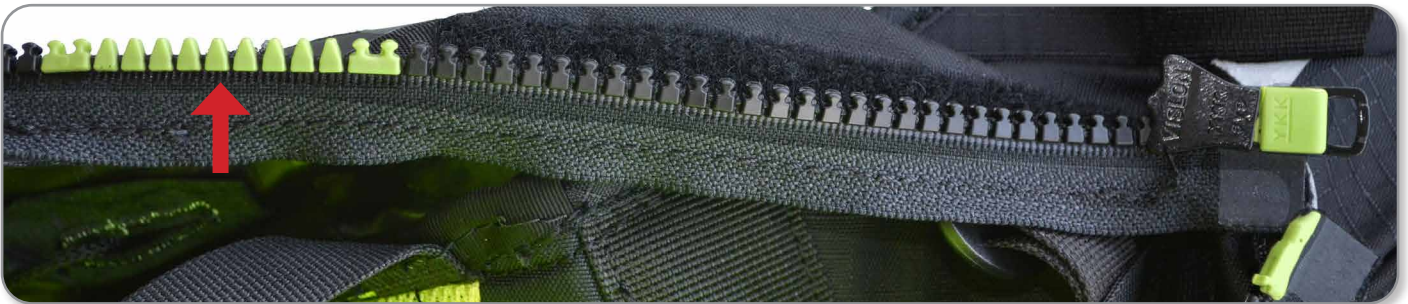
Only a single zip slider is required on a SOLAS Deckvest



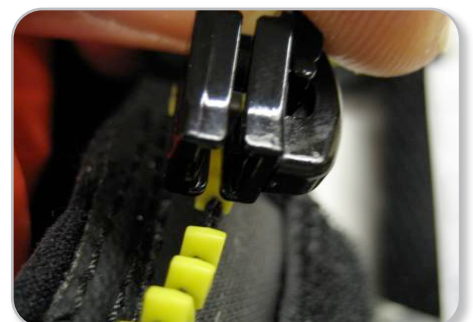
Note the orientation of the word VISLON
It is very important to put the slider in correct position or
the zip will not function correctly.

The zip slider should be replaced with:
DW- ZPL/8 - SOLAS Zip Slider

1. To remove or replace a slider select the centre tooth (5th) and remove using a pair of thin nose pliers.



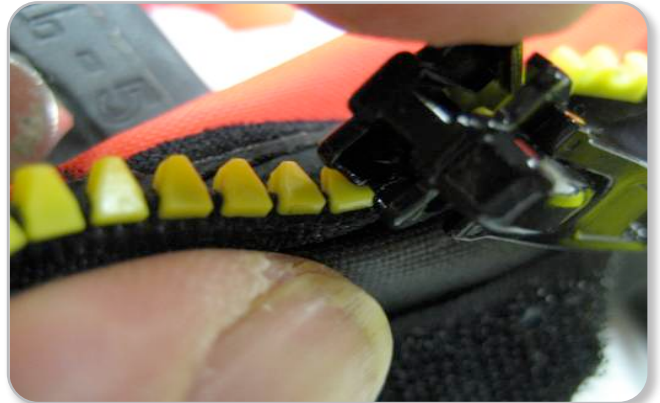
2. If removing a broken slider move the slider to the gap, tilt the front end up and pull through.



-
3. Position the carriage onto the zip material and against the next tooth.



-
4. Tilt the teeth in front of the zip to one side.



-
5. Pull down and backwards on the zip carriage keeping the other teeth out of the way.

The carriage should slide onto the track (some force may be required).



-
6. Slide the carriage back over a few teeth to ensure it has engaged properly.



8: Repacking

1

To pack the deckvest firstly join the two zip pullers together and start to move the top zipper so the zip starts to join



2

Fold the buddy line up and secure it to oral tube by wrapping the velcro around oral tube and line.

Allow 50cm from end of knot to connection at oral tube to allow for the bladder inflation



3

Place handles in the pockets and make sure cord is not caught



4

Place uml unit into the mesh pocket ensuring the manual handle cord runs underneath the bladder

Ensure the handle cord is not tangled or caught

This is important for manual operation

Concertina bladder so the oral tube sits on top



5

Start to zip the cover together



6

Close the flap over the yellow breakout section



7

If a sprayhood is attached this should be under the bladder and in front towards neck

Sprayhood does not go over the back of bladder



8

Concertina top section in

It is easier to turn Deckvest over for this part

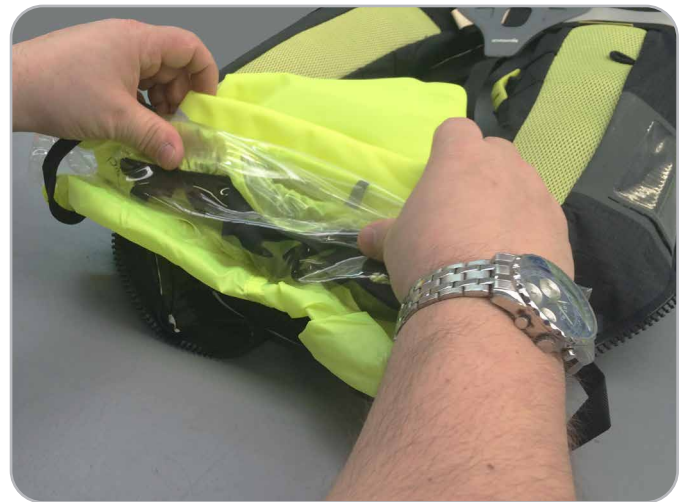
As there is quite a lot of material around the neck it will need to be pleated 3 times.



9

If a sprayhood is required, place this under the bladder in front of it and pack on top.

Pack away from the neck but do not pack down into the back section of Deckvest otherwise it will not open when required.



Attach sprayhood lanyard to whistle



10

Second UML unit

Make sure cylinder is in front of pylon strap and not inside. Otherwise it may get caught when inflating

No mesh pocket to place firing cap in



11

Concertina bladder and place oral tube on top

Pylon light should be placed next to the oral tube making sure nothing is caught or wrapped around the stalk.

Pleat the bladder over the Pylon and oral tube



Check lifting loop is secured to retainer strap

SOLAS + uses a different loop - Attach as per picture.



12

Run Pylon wire down to the side and place Pylon body towards the bottom of the bladder.

Make sure the contacts are facing down so water does not sit on top of the contacts

Tuck zip end inside cover



Rear Harness Loop Fitting Instructions (Optional extra for SOLAS +)

DW-RHA

- A** In order to fit the rear harness loop you need to un thread the webbing from both front side buckles on the SOLAS +



- B** Turn the lifejacket over so that the back webbing retainer is showing.



- C** Take harness loop and thread over the belt webbing on both sides



Pass over webbing retainers



- D** Re thread belt webbing through both buckles - Check it is threaded correctly



Fold belt webbing up in webbing retainer





Useless unless worn

Spinlock supports the Royal National Lifeboat Institution (RNLI)
'Sea Safety Lifejacket Campaign'

Spinlock Ltd
Birmingham Road
PO31 7BH Cowes
United Kingdom



Spinlock Limited quality management
system is accredited to
ISO 9001 : 2015

The Spinlock Deckvest is extensively protected under
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