

# Lifejacket Quick Service Guide

# UML MODEL

Deckvest DURO FC 170N & 275N



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**Issue Number: 1** 

Registered design EC + US Patent No. 7631728 www.spinlock.co.uk

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If you need any assistance with servicing please contact: Deckware@spinlock.co.uk

#### 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.

### DECKVEST DURO FC FEATURES



### 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.

#### 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



DW-SV2





DW-SV3

#### Process

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

Complete the service log on the internal label.

Complete service certificate with approval stamp.

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

	We recommend the lifejacket is serviced every two years by an approved centre.				
Nous vous conseillons de faire réviser votre gilet de sauvetage tous les 2 ans par un centre agréé					
Bitte geben Sie Ihre Deckvest alle 2 Jahre zum Service bei einem lizenzierten Händler.					
Recomendamos que el chaleco salva vidas sea inspeccionado cada dos años por un centro autorizado					
	Vi anbefaler at redningsvesten bliver serviceret hvert andet år af et godkendt servicecenter				
	Suosittelemme että pelastusliivi huolletaan kahden vuoden välein valtuutetussa huoltopisteessä				
	Vi rekommenderar att flytvästen lämnas in för service av ett godkänt servicecenter vartannat år				
	Vi anbefaler at denne redningsvesten blir sjekket hos et godkient servicesenter vært andre år				
	Recomendamos o colete salva vidas é servida a cada dois anos por um centro aprovado. Si consiglia di revisionare il giubbotto di salvataggio ogni due anni presso un Centro autorizzato.				
We adviseren het reddingsvest elke 2 jaar te laten keuren door een dealer. Greater than 10 years return to Spinlock.					
	Date of last service				
	Date of last service				
	Date of last service				
	Date of last service				
		3W612A_1			
5			1		

### Servicing steps 1: Harness and cover

Check all stitching for signs of wear or damage:

Locate manufacture date and serial number inside the cover, on the internal label.

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

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

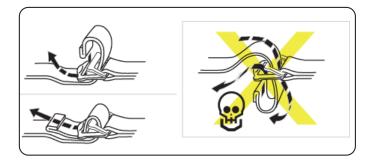
### Webbing:

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).

Check all webbing has been passed through all buckles correctly.





### 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.

Crotch strap buckle on the legstrap part can be replaced. DW-BKL38

### 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 21.

# 2: Quick Burst Zip Information

Stage 1



In order to open the Deckvest take the yellow part of the zip and pull apart. Then split the zip apart all the way around the Deckvest until you reach the opposite end.





Once you have reached the opposite side, ensure the slider is fully down to the bottom zip stop. The inside zip chain (RHS on image) can then be pulled out of the slider.





Once the zip has come apart, take the slider and move it back round to the start of the zip (nearest to yellow section) so the two zip sliders are together.



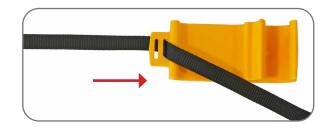


Once both sliders are fastened together zip up like a regular jacket, continuing over the yellow quick burst section until you reach the opposite side of the cover. Once this is done pull the Velcro cover over the yellow quick burst zip section to cover this part.

#### NOTE: Deckvest Duro has one zip slider



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)

MOB 1 Ribbon + Clip + Slider



### 6

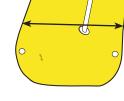
Slide toggle on to ribbon and pass ribbon through inside slot hole on grey plastic activation slider on right hand side.

7 Pass ribbon up through outside slot hole

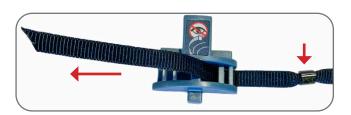
8) Pass ribbon down through inside slot hole

9 Leave roughly 60mm of tail of ribbon tail

Length of ribbon should roughly be the length from bladder weld to weld

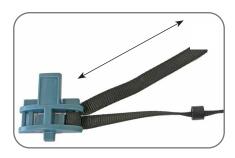


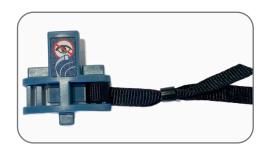
















(13) Attach plastic cap to MOB 1 unit

Place toggle into gap on right hand side of slider

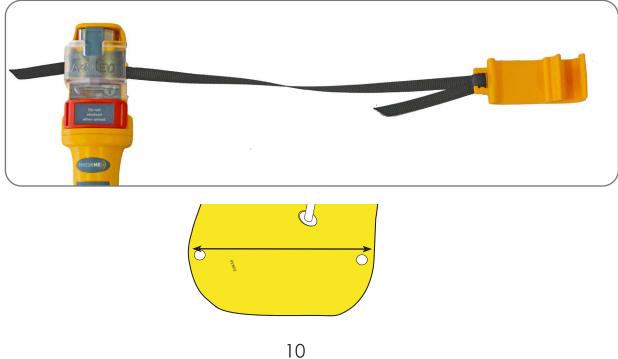
Tail of ribbon should lay across slider



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(12)

Double check the ribbon measures no longer than the length of the weld to weld on the bladder



Attach bracket to oral tube and pass MOB1 unit underneath the bladder and then clip on to bracket.

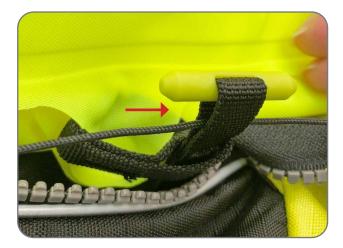


### (16)

(15

Thread the safety laynard from MOB 1 unit through the webbing in the lower right bladder connection toggle and secure with a knot.

This ensures the unit does not become detached when the bladder inflates.





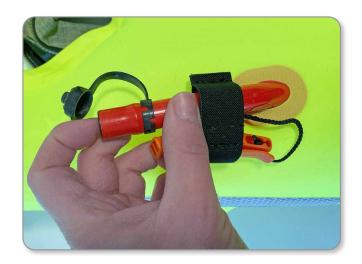
## 3: Inflation test for the UML Mk5 and UML Pro Sensor®

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

- A. Remove cylinder and firing cap, inflate through the oral tube with clean dry air (airline or similar) until firm and lobes are touching. Approx 2 psi (14 kPa).
- B. Leave cap off the oral tube whilst testing.
- C. Leave standing for 24 hrs in a temperature stable environment. If more than a slight softening (approx. 10%) the bladder must be replaced.
   Pressure monitoring can be carried out over a 6 hour period to check for leaks.
- D. Remove air from the bladder using suction do not squeeze or crush bladder.







Bladders can be replaced if damaged – see page 13 for Bladder identification instructions.

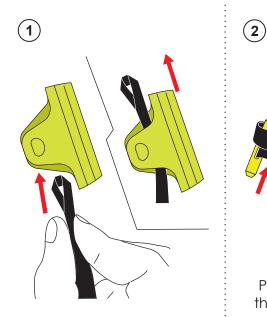
### 3.1: Bladders

Replacement bladders are available for models below - See harness batch number for identification.

Batch number example	170N - 220101DDF	275N - 220101DF2					
Bladder Part Numbers	170N - DW-BLD/170UML/3	275N - DW-BLD/DURO275					
Firing Heads if required							
DW-UMK5 - UML MK5 Firing Unit							

DW-UPS - UML Pro Sensor Elite Firing Unit

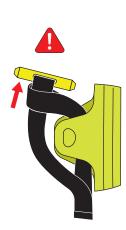
Replacing the bladder can be done by following the below instructions.



Pass loop through bladder and push all the way through



Push toggle through loop



Pull loop over toggle and check it is secure







# 3.2: Components for the UML firing heads

Firing Mechanism - All Deckvests are automatic and use UML components either :





MK5 used on plastic round manifolds with torx bolt



Pro Sensor Elite used on Plastic round manifolds with torx bolt



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.



1. Check that there is no damage to the lanyard and handle.



2. Ensure that the cutting pin and cylinder indicator pin moves freely in the body.

DV-SV5 - Replacement UML Pro Sensor Cylinder Sealing Gasket

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

DW SV06 Replacement Cylinder O Ring for yellow UML Mk5

### Cylinders

33g CO<sup>2</sup> cylinder 170N
60g CO<sup>2</sup> cylinder 275N
Unscrew the cylinder anti-clockwise to remove it

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.

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

33g for 170N

60g for 275N

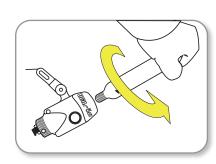
Check total weight against specification stamped on the bottle.













# 3.3: Components

#### Oral tube

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

Spare Cap: DW-SV07



#### Sprayhood

Check attachments are secure and that there is no damage to the window.

2014 onwards Sprayhoods can be replaced on Deckvest 5D models

1. Thread webbing through buckle at the back of neck

2. Thead webbing back through to secure.

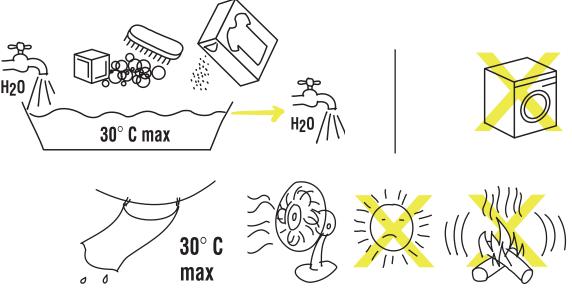
### Spray hood webbing should be left 10cm Long



### 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.

For 2012 models onwards the bladder can be removed and the cover section washed separately



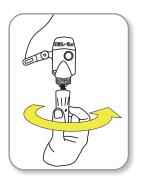
### 5: Re-attaching components and arming the lifejacket UML Mk5 and UML Pro Sensor® automatic firing heads

- 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: DW-RAK
- 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.







Re attach cylinder retainer

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

On the Pro Sensor, ensure that both indicators are showing green.

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 label with a permenant waterproof pen. Show the date that the service was completed.





# 6: Pylon

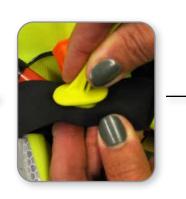
2. Check the light functions

Press and hold the test button for 3 seconds untill 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



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™

\\ Lume-On<sup>™</sup> lifejacket illumination lights are water activated.

- \\ LED lights illuminates the lifejacket bladder to increase visibility.
- \\ Battery life 6 hours (minimum 2 hours flashing at full intensity).
- \Lifejacket and bladder must be throughly dry before attaching the Lume-On<sup>™</sup> or the stickers will not bond.
- \\ Fitting the Spinlock Lume-On<sup>™</sup> could change the performance and warranty of your lifejacket, please contact your lifejacket manufacturer for clarification if you are unsure.

All Spinlock lifejackets are approved for use and fitting with the Spinlock Lume-On<sup>™</sup>.

1. Make sure your lifejacket is clean and dry before application.

Open the lifejacket to expose the bladder. Unpack your lifejacket following the manufacturer's instructions.

If attaching to a used lifejacket, wipe the bladder area for attachment with a damp cloth and leave to dry. Salt and other contaminates will affect adhesion.

4. Remove one of the Lume-On<sup>™</sup> stickers from the packaging, remove the backing paper. Stick the Lume-On<sup>™</sup> to the bladder in a position:

- a. Clear of any toggles or straps.
- b. Clear of any bladder folds or creases.
- c. Where it will make contact with the water when inflated.

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

7. Leave the jacket for 24 hours to let the sticker adhere to the bladder before re-packing.

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

The two lights bond directly onto the underside of the inflatable part of your lifejacket.

The Lume-On<sup>™</sup> can only be attached to lifejackets with a separate inflatable and cover construction.

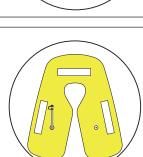
5. Stick each Lume-On<sup>™</sup> to the bottom of the back of the bladder lobe, in the area pictured.

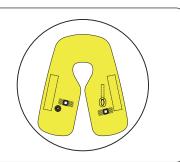
Press firmly.

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**8.** Re-pack the lifejacket after 24 hours referring to the manufacturer's instructions.

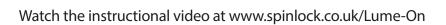
3. Turn the bladder over, you do NOT need to remove the bladder from lifejacket.

**6.** Make sure the Lume-on is well stuck on the bladder by applying finger pressure all around the sticker.

9. Lume-On<sup>™</sup> positioning on other lifejacket brands may vary.

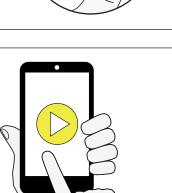
For best results inflate the lifejacket using the oral tube and position at the bottom of each chamber where the lobe would be in the water.

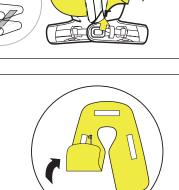
See the video for more information.



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# 7: Zip Slider Replacement

Correct Zip position for a double puller zip.



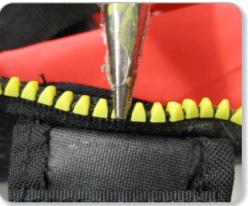
The Deckvest Duro uses a single zip slider

DW- ZPL/8 - Duro Zip Slider

1. To remove or replace a slider

Select the centre tooth (7th) On outside of the zip chain and remove using a pair of thin nose pliers.





 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

 Check torx bolt is tightened to 3Nm with a torque driver. Check Cylinder and firing cap is secured correctly

Pro Sensor: Check to make sure the indicators are green

MK5: Check green clip is in place

Join the zip puller together

The packing stage of the bladder is completed in three pleat stages, following the three reflective stripes.

Make sure toggles are siting on top of bladder **Pleat 1** starts at the firing unit side





### 2.

275N bladder will need to be tucked up underneath firing cap due to the size of the bottom lobes.

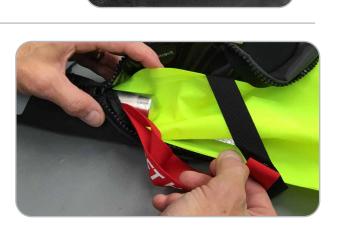


### 3.

Start to zip the jacket up and tuck the breakout point cover into the pocket.

### 4.

Ensure the Lifting loop is not tangled up and to the side of the cover.



2225

#### Pleat 2

Concertina top section and make sure the toggle sits on the top of the bladder

If a Sprayhood os required this needs to be placed on top of the bladder towards the back so it is not behind your neck when bladder inflates

#### Make sure sprayhood comes underneath bladder

Scrunch sprayhood up (not fold) so it opens up easily

6.

If sprayhood is required for the order, attach lanyard to retainer strap via press stud

### 7.

Once you have reached the top fold the bladder corners in so it sits neatly and continue to zip round







9.

### Pleat 3

Concertina the other side as before



10.

Concertina the bladder over the oral tube and whistle to so these sit at the bottom to avoid protruding at the top of the cover

If a Pylon light is required this should be placed next to the oral tube making sure nothing is

caught or wrapped around the stalk.



11.

Zip towards the last section Fold bladder end upwards Place Pylon body under the fold

Zip round to close and tuck zip ends inside cover





## Notes.....



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

Spinlock Ltd Birmingham Road PO31 7BH Cowes United Kingdom







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For continuously updated user guidance go to www.spinlock.co.uk