# spinlock

# Approved Lifejacket Service Manual for Deckvest Vito with Hammar® Inflator



**DECKVEST VITO** 

ISSUED: SEPTEMBER 2024 Issue Number: 4 1W070A\_4

#### Issue 3

- Added zip slider replacement for 2022 dated models. P.23
- Updated MOB1 fitting instructions. P.9

#### Issue 4

- Added note about recycling components. P.14

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

### IMPORTANT LEGAL NOTICE REGARDING USE OF DECKVEST SERVICE MANUAL

- 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.

### 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.

#### **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.

Digital scales



Adaptor



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 jacket either on the bladder 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/RegisterYourDeckvest

### **Product Introduction**



### Inflated:



### An introduction to the Hammar® Lifejacket inflator

One of the principal problems with automatic inflatable lifejackets is sudden, unexpected inflation when it is not required. This could, in turn, result in being trapped onboard or compromise the ability to handle a boat. Furthermore, it might mean that a lifejacket is not available when it is really needed.

The Hammar Automatic Lifejacket Inflator has a unique hydrostatic valve that prevents unexpected inflation. It means that no activation will occur in rain, spray, splashing water or humidity. It is easy to use. The green indicator shows that the inflator is ready for use. The inflator cap does not require service. It is just replaced every five years, unless it has been in action to save your life.



- Unique hydrostatic valve no activation in rain, spray, splashing water or humidity
- Single point indicator (green) shows that the inflator is ready for use
- Cylinder seal indicator (green) ensures that the cylinder has not been used
- Gas cylinder located inside the lifejacket bladder.
   Cylinder protected against corrosion
- Inflator cap does not require service for five years



### 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

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 webbing on the belt is damaged the harness will need to be replaced

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

#### Caution:

Jackets over 10 years old should not be serviced.









#### 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 a repair on the functionality of a 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 page 22.

### 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.



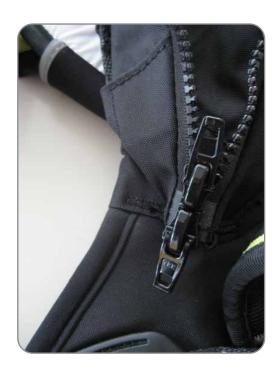


Once you have reached the opposite side, ensure the slider is fully down to the bottom zip stop. The inside zip chain (RHS on image) can then be pulled out of the slider.





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 zip flap cover over the yellow quick burst zip section to cover this part.

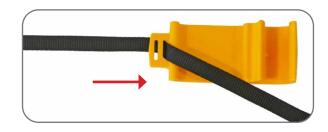
### Deckvest Fitted with Ocean Signal MOB 1 AIS Device

The Ocean Signal AIS MOB1 device, can be fitted to all models of Spinlock inflatable lifejacket. If there is an AIS unit fitted, this should be removed before the inflation test to avoid the unit activating.

Use cord lanyard to attach the unit to the jacket in case it is pulled off the oral tube during the inflation.

#### **AIS MOB 1 Fitting Instructions**

Thread ribbon end through oral tube bracket.



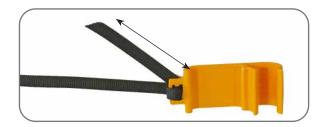
Thread back up through second hole towards outer edge



Thread back through inside hole



Leave 60mm on tail from end of plastic





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)

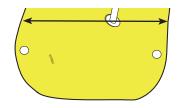
Pass ribbon through outer hole

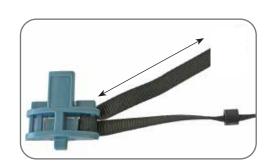


(8)

Leave roughly 60mm of tail

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





(9)

Slide tail through toggle







(11)

Place toggle into gap on right hand side of slider Tail of ribbon should lay across slider

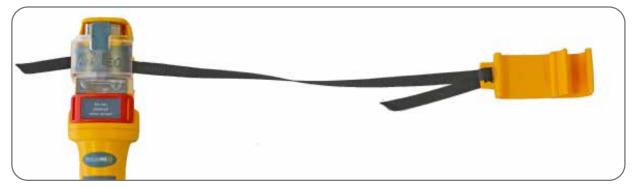


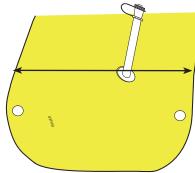
(12)

Attach plastic cap to MOB 1 unit



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







Pass oral tube bracket underneath bladder and attach to oral tube

Clip MOB 1 Device to oral tube bracket - MOB 1 device should be fitted to the outerside of the oral tube





(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.





Fitting video available at www.spinlock.co.uk/mob1

### 3: Inflation test for the Hammar® automatic firing head

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

- 1. Remove the head following the rearming instructions on page 15
- 2. Check cylinder weight.
- 3. Check head is in date.
- 4. Replace if necessary and refit components.
- 5. Check there is no debris in the oral tube and inflate with clean dry air (airline or similar) until firm and lobes are touching. Approx 2 psi (14 kPa).
- 6. Leave cap off the oral tube whilst testing.
- 7. 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.
- 8. Remove air from the bladder by using suction do not squeeze or crush bladder.





### 3.1: Components for the Hammar® firing head

1. Ensure the head has not been fired and the indicator is showing green and that the unit is in date.



2.

Cylinder weight is marked on the sticker, check this is correct with the digital scales.



3. Ensure indicator on backing plate is showing green.

Do not turn the dial on backing plate as this could activate but not pierce the cylinder. This would then cause the unit to become unusable and a new cylinder and backing plate would be required.

If it is red it needs to be replaced



#### Re-arming Kit specific for Vito:

DW-RAH/V170 DW-RAH/V275

This uses a shorter handle cord length

For any items that have been replaced, Please place any items that are recyclable in to correct waste bin for recycling. This is inline with our Waste and ESG policies

### 3.2: Rearming Hammar® Deckvests

1. Place the lifejacket on a smooth, flat surface and wipe off any water. Hold the gas cylinder through the fabric, using one hand. (Figure 1)



Figure 1

2. Insert metal key as shown to the right and turn the key counter-clockwise between black locking ring and labelled yellow cap. (Figure 2)

The black locking ring will now turn counter-clockwise. (Figure 3)

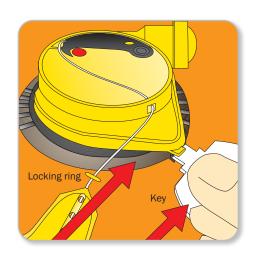


Figure 2



Figure 3

3. Now turn black locking ring counter-clockwise (Figure 4) and lift off cap (figure 5)

Dispose of used cap. (cap = yellow inflator operating head)



Figure 4

4. Squeeze sealing ring to elongate and remove the inflator body through the sealing ring. (Figure 6)

Dispose of used inflator body in an environmentally approved manner.



Figure 5

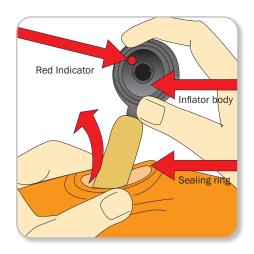


Figure 6

 Check that the indicator is green. Insert new inflator body with gas cylinder pointing upward inside the lifejacket.
 Let the sealing ring rest on inflator body around the four lugs. (Figure 7)

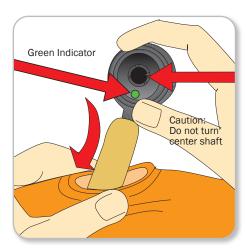


Figure 7

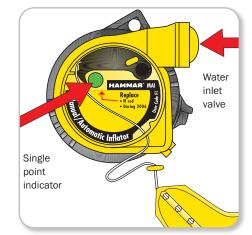


Figure 8



Figure 9



Figure 10

- 6. Now check the new manual/automatic cap as follows: (figure 8)
  - 1. Single point indicator showing green?
  - 2. Expiry date OK?

If YES is the answer to both these questions,

then proceed as follows.

If NO get a new cap.

7a.

Hold the gas cylinder through the fabric of the life jacket. (Figure 9)

#### PLEASE NOTE:

When reattaching the Hammar head, ensure the cylinder is pointing to 1 O'Clock, this will ensure that the Cylinder does not come in contact with the face during inflation.

The handle is then passed through the button hole in the cover.

7b.Position the replacement cap with the water inlet valve pointing to the right and press it FIRMLY onto the inflator body and sealing ring. (figure 10)

8. While pressing FIRMLY onto the inflator body turn the BLACK locking ring clockwise into the locked position.
Pull on the cap to make sure it has locked onto the inflator body. (Figure 11)



Figure 11

#### CHECK:

To see that the indicator on the cap is green; that the pull to inflate lanyard is present and that the locking ring is locked. When the locking ring is locked, it cannot be turned counter-clockwise by hand. (Figure 12)

replaced, always inflate the jacket through the oral tube and check that it stays inflated at least overnight.

Empty the lifejacket again by pushing in the non-return valve in the top of the oral tube and press out ALL RESIDUAL AIR from the bladder, so that the jacket may be folded properly.

Let the lifejacket dry before packing.

If your lifejacket has been used and/or the Hammar Inflator

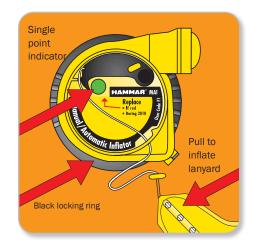


Figure 12

### 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

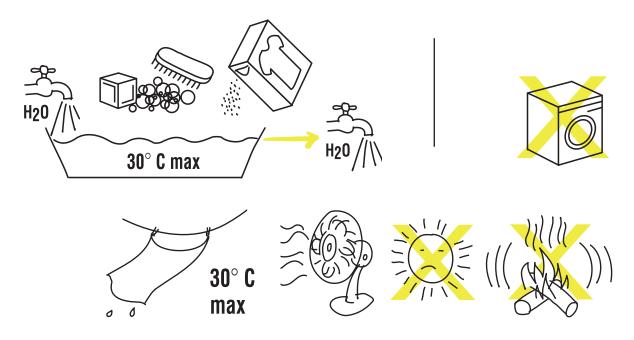
Check attachments are secure and that there is no damage to the window.

Sprayhoods can be replaced - See page 21

### 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: Bladders

A.
Check the 5 attachment holes for any signs of wear or tears.

If the Bladder is damaged, it is possible to replace it (contact Spinlock).



B. Bladders can be removed and replaced by pushing the toggle through the 5 attachment holes









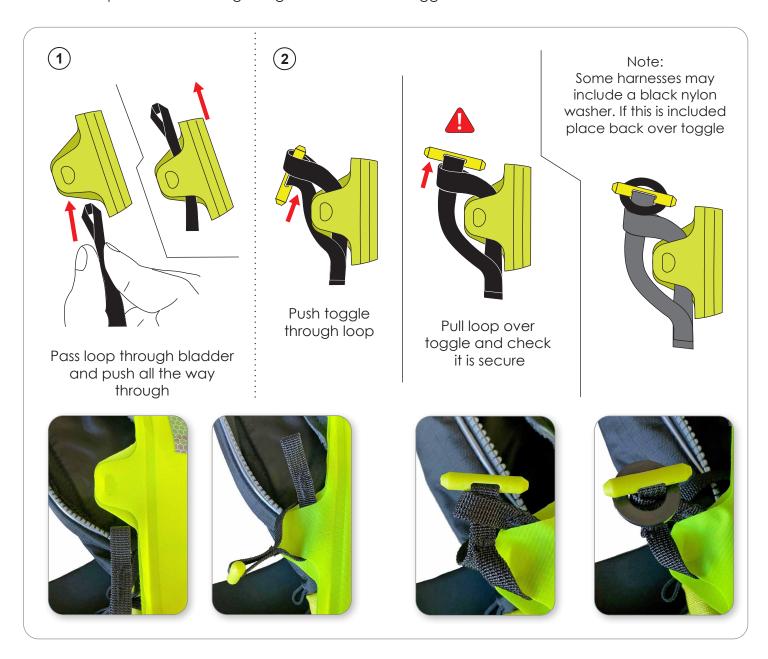
C. When re-attaching a bladder make sure it is passed through the Pylon and retainer strap





### Deckvest Vito 2020 - Replacement bladders

The Vito was updated at the beginning of 2020 to use a toggle connection to attach bladders to cover.



Replacement bladders are available

#### 170N

**DW-BLD/170HAM/VT** - Pre 2020

DW-BLD/170HAM/VT2 - 2020 onwards new torpedo toggles

#### 275N

DW-BLD/275HAM/VT- Bladder - Only uses new torpedo toggles

### 6: Sprayhood Replacment

1.
Attach small grey webbing strips to holes at the top of bladder and pass bladder toggle through center hole.







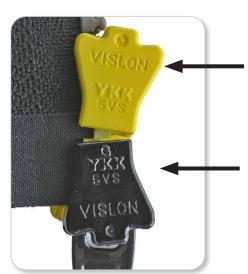
2. Take lanyard attached to retainer strap and pass toggle through hole on front of sprayhood





### 7: Zip Slider Replacement - - Pre 2022 dated products

Correct zip assembly for a double puller zip.



Top Yellow slider

Bottom slider

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

DW-ZPL-Zip Slider Pack

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.



### Zip Slider Replacement - 2022 dated products onwards

1. Open zip up from the quick burst zip section.

Take remaining zip slider and run round to the side opposite the firing head.

Check which slider needs replacing. You will need to remove the yellow slider if the black slider needs replacing.

There is an angled slot which the zip slider can slide out of on the left section of the zip.

Note: If there is not, you will need to follow the instructions for removing a yellow tooth from the QBZ section.







2. Take the black slider and slide onto the zip end first followed by the yellow slider as per picture. Check orientation of the sliders are correct.











3. The zips sliders can now be run round to the firing head side and joined together to start the zip.



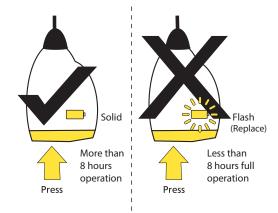
### 8: Pylon

Battery test feature on Pylon light

Press the test button once

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

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



#### 2. Check the light functions

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

Pylon will automatically switch off when button is not pressed

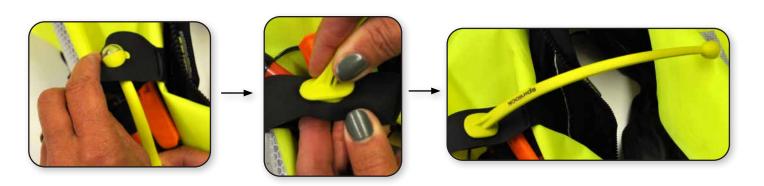


#### 3. Replacement light: DW-PY/L1

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



- \\ Lume-On™ 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™ or the stickers will not bond.
- \\ Fitting the Spinlock Lume-On™ 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™.

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.



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- $On^{TM}$  can only be attached to lifejackets with a separate inflatable and cover construction.

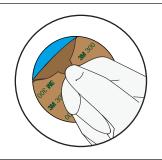


3. Turn the bladder over, you do NOT need to remove the bladder from lifejacket.



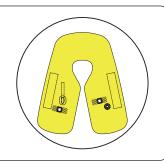
- **4.** Remove one of the Lume- $On^{TM}$  stickers from the packaging, remove the backing paper. Stick the Lume- $On^{TM}$  to the bladder in a position:
- a. Clear of any toggles or straps.
- b. Clear of any bladder folds or creases.
- c. Where it will make contact with the water when inflated.

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



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

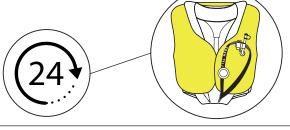
Press firmly.



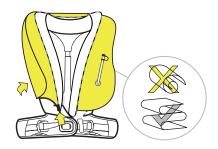
**6.** Make sure the Lume-on is well stuck on the bladder by applying finger pressure all around the sticker.



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



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



**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.

Watch the instructional video at www.spinlock.co.uk/Lume-On



### 9: Repacking VITO Deckvest

1. To pack the deckvest first join the zips together on the right side by firing unit

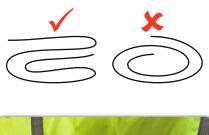


Attach lifting loop retainer strap via press studs
 Lift here print should face outwards.



#### **Important**

Bladder should not be twisted or folded too tightly. Ensure there is no fabric covering the auto cap.









3. Concertina the bladder in starting at the Hammar Unit.
Push Hammar unit and bladder down into meshed area.

## Do not push too far down into pocket otherwise it may get caught when inflating.

Join the zips together and start to move zip up

Ensure manual handle is placed in its pockets and cord is not tangled or caught

#### This is important for manual operation



4. Start to run the zip up and close the flap across breakout point







5. Turn jacket over on its back, squeezing sides of hoop and then push into back panel

Top of hoop should be flush with top of back panel





6. Pleat the back of bladder so reflective strip is on top.





7. Push Pylon strap down towards oral tube so it does not sit on the shoulder when packing.



8. Pack Pylon down over bladder and place Pylon battery inside the cover towards oral tube. Do not pack it low down as it will get caught. Check Pylon is not covered by anything which can stop it deploying.

Fold bladder end upwards so that it is not stuck inside the bottom when inflating.

Check whistle is attached





9. Zip round to close and tuck zip ends inside cover





10. Check manual handle is in pocket securely and also quick release handle is tucked inside



### 11. Crotch strap buckle elastic - Threaded through buckle as per below.







Crotch strap can be folded and placed in rear pocket



### 10: Harness Release System - Optional Equipment

Open the flap on the back of the belt section
 If converting from a non HRS VITO, cut the harness loop out along the flat section.



2. Pull cover back on left side and find the black webbing loop next to red lifting loop webbing Pass webbing from HRS unit through the loop.





3. Pass handle and HRS unit through the webbing loop and then pull tight.





### HRS Re-arming

1. Push HRS loop through the Vito slots on front with the HRS text being as per picture



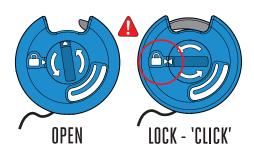


2. Push top loop through bottom loop

# Warning Make sure the HRS strop passes over main black webbing



3. Hook HRS unit on the small loop and use the handle on its side to turn the dial to the left so that it clicks into the locked position.





4. Check it is in the locked position

If for some reason you have made a mistake during the fitting process, pull the handle to release the HRS unit.

Do not turn the lock mechanism backwards as it will not release.



#### 5. Place handle onto press stud



6. Place HRS unit and cord into the flap at the bottom of the Vito. This stops the unit moving.

Close the inspection panel and secure the velcro.





Notes.....

Spinlock Ltd Birmingham Road PO31 7BH Cowes United Kingdom







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