

SMRT 150N & 275N USER MANUAL



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1 INTRODUCTION

This user manual instructs personnel on how to correctly wear sMRT 150N and sMRT 275N PFDs. Carefully read and follow all instructions to ensure the PFDs are worn safely and correctly. Topics in this user manual include:

- Donning the PFD
- Inflating the PFD
- Deflating and repacking the PFD
- Maintenance and Storage of the PFD

1.1 TERMS AND ACRONYMS USED IN THIS DOCUMENT

Term	Explanation
DSC	Digital Selective Calling – technology used to automate calling on terrestrial marine radio systems.
MSLD	Maritime Survivor Locating Device
PFD	Personal Flotation Device
PLD	Personal Locating Device
SOLAS	Safety of Life at Sea: International maritime safety treaty concerned with minimum safety standards in construction and operation of maritime equipment
VHF	Very High Frequency radio band – 30 to 300 MHz.

Table 1

2 PRODUCT DESCRIPTION

Integrated sMRT PFD solutions include purpose-built man overboard alerting devices to safeguard your crew 24/7. MRT's SOLAS approved life jackets are simple and easy to use. When immersed in water the sMRT PFD will automatically inflate and self-right the user to provide maximum protection in an emergency.

For documentation and information on all MRT PLDs see www.mrtsos.com.

2.1 PFD PRODUCT SPECIFICATIONS

sMRT 275N and sMRT 150N PFDs are manufactured to the highest specifications and are approved to the latest SOLAS 2010 standards. Both PFDs are designed for constant wear and feature a single front closure buckle and side adjustment.

The yoke style delivers a low profile for the wearer, with the zipped cover and mesh back providing an increased level of comfort.

General Specifications	
Manufacturing process	ISO 9001:2000
PFD	2010 SOLAS
Inflation	
Automatic	ISO 12402-7
Manual	ISO 12402-7
Oral	ISO 12402-7
Construction	
Buoyancy	Minimum 300 Newton's when fully inflated
Lifting Becket	ISO 12402-7
Emergency Whistle	ISO 12402-8
Light	SOLAS Approved
MSLD	Fully integrated within the PFD
Buddy Line	For attachment during emergency
Bladder	ISO 12402-7, high tenacity PU coated nylon, integral emergency light attachment
Seams	Welded 6mm RF weld
Cover	210 denier PVC coated nylon with breakout zip closure
Mesh back	Polyester
Windows	Clear PVC for activation mechanism and MSLD
Neck Panels	Neoprene
Waist belt	Front closure with optional deck harness, 48mm polyester webbing with minimum breaking strain of 24.75KN
Crotch strap	For secure fit

Table 2

3 GENERAL FEATURES

3.1 FRONT VIEW OF SMRT 275N



Figure 1

3.2 REAR VIEW OF SMRT 275N



Figure 2

3.3 FRONT VIEW OF SMRT 150N



Figure 3

3.4 REAR VIEW OF SMRT 150N



Figure 4

3.5 FRONT VIEW OF SMRT 275N INFLATED



Figure 5

3.6 FRONT VIEW OF SMRT 150N INFLATED



Figure 6

4 CHECKS BEFORE EACH USE

1. Ensure the pull-tabs are accessible.
2. Visually inspect the PFD for damage, wear, tear, excessive abrasion or contamination from foreign materials.
3. Check all straps and stitching.
4. If a PLD is installed check it is armed correctly.
5. Check rear window to verify activating unit is green.

5 HOW TO DON THE PFD

1. Unclip the buckle on the front, along with both crotch straps.



Figure 7

2. Put each arm behind the bladder and lift the PFD over and onto the shoulders.



Figure 8



Figure 9

3. Clip the front buckle back together.



Figure 10

4. Pull the crotch straps through the legs and make sure they are not twisted.



Figure 11

5. Clip the crotch straps to the bottom of the PFD and then fasten until tight.



Figure 12

6. Fasten the waist belt until tight, but also so the PFD is still comfortable to move in.



Figure 13

6 HOW TO INFLATE THE PFD

On immersion in water, the lifejacket will automatically inflate. Failing this, manual activation will be required.

6.1 MANUAL PFD INFLATION

1. To manually activate the lifejacket pull hard in a downward motion on either, or both of the red manual activation handles.



Figure 14

2. If your lifejacket does not fully inflate, or requires more air, flip off the black cap on the red oral inflation tubes and blow to top up air.

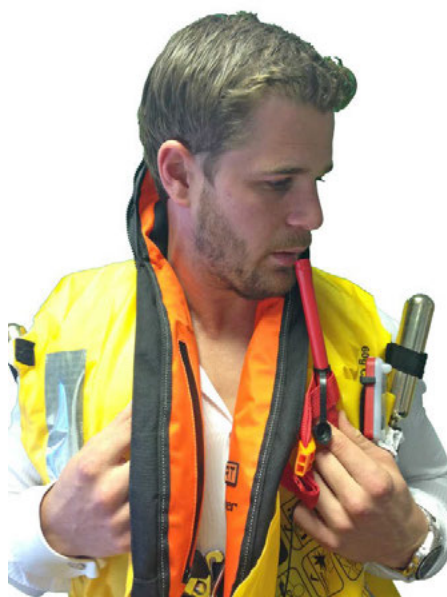


Figure 15

7 DEFLATING AND REPACKING THE PFD

7.1 REPACKING THE SMRT 275N PFD

1. Make sure the quick release buckles are outside the cover and connected together as this will make the repacking easier (see Figure 16).



Figure 16

2. Ensure all residual air is removed from the bladder and neatly flatten out the deflated bladder on the workbench (see Figure 17).



Figure 17

3. Ensure the two dust caps are fitted and the whistle is in place (see Figure 18).

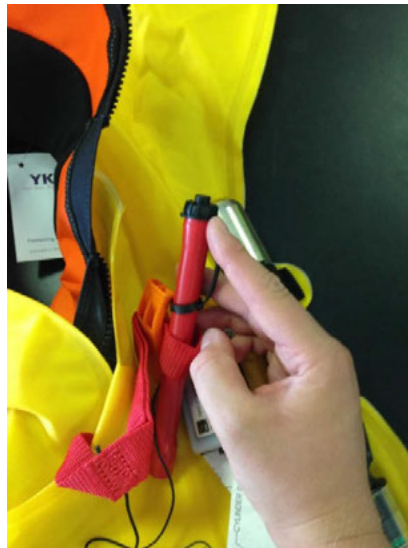


Figure 18

4. Ensure the light is securely in place. To secure the light place the black T-clip under the Velcro strap and push the light into position onto the T-clip (see Figure 19 and Figure 20). Ensure the light switch is configured in the Auto position for automatic water activation (see Figure 21.)

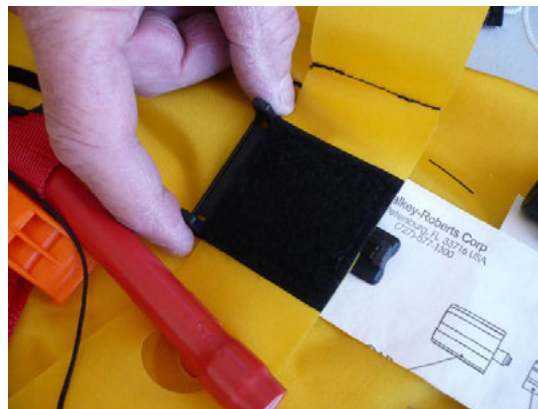


Figure 19



Figure 20



Figure 21

5. Clip the spray hood into the two clips at the top of the bladder see (Figure 22). Then attach the Velcro section on the pull cords to each of the CO2 cylinders where the other Velcro section is located (see Figure 23).



Figure 22



Figure 23

6. Fold the small part of the bladder; the activation cord traps concertina style with the oral tube laid on top (see Figure 24).

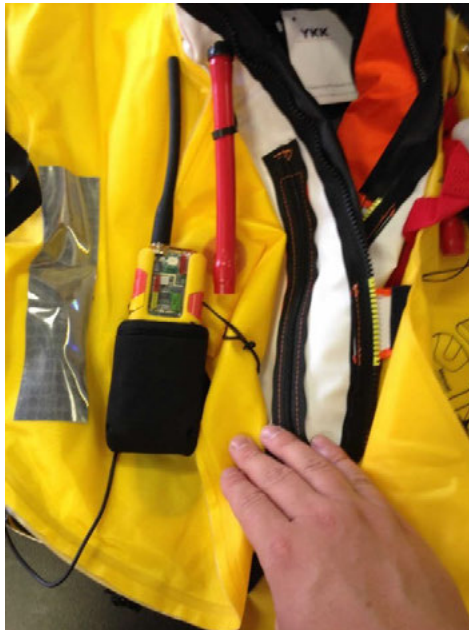


Figure 24

7. On the right side of the bladder (when worn), fold the bottom and the side together making sure the operating unit is facing the back of the cover (see Figure 25) and the pull handle is not obscured. Then close the Velcro tab to hold (see Figure 26).



Figure 25

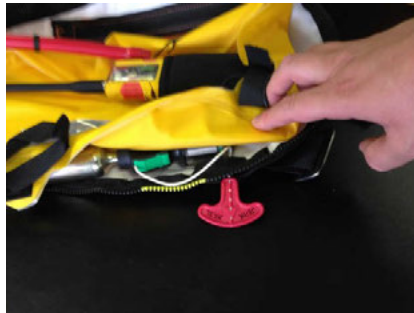


Figure 26

8. Open the Velcro access point below the yellow burst point and feed the manual activation handle through (see Figure 27); fix to the access point using the Velcro tab on the handle (see Figure 28). (Note: ensure the Velcro tabs on the handle are positioned correctly).

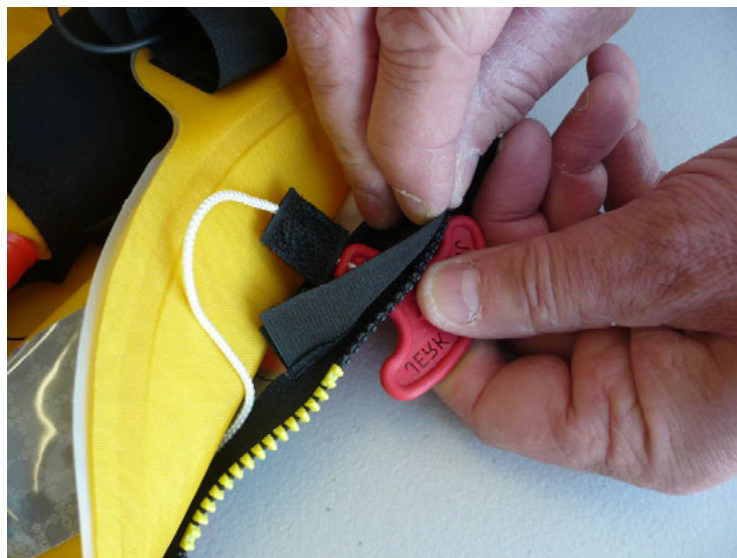


Figure 27



Figure 28

9. Please note that the PFD is fitted with a one-way zip. Separate the zip and run it around the inside of the jacket to the other end (see Figure 29 and Figure 30).



Figure 29



Figure 30

10. Next attach the zip together and zip it a few centimetres. Then tuck the zip into the end (see Figure 31 and Figure 32). Note: once partially inserted you can pull through easily from the inside of the jacket.



Figure 31

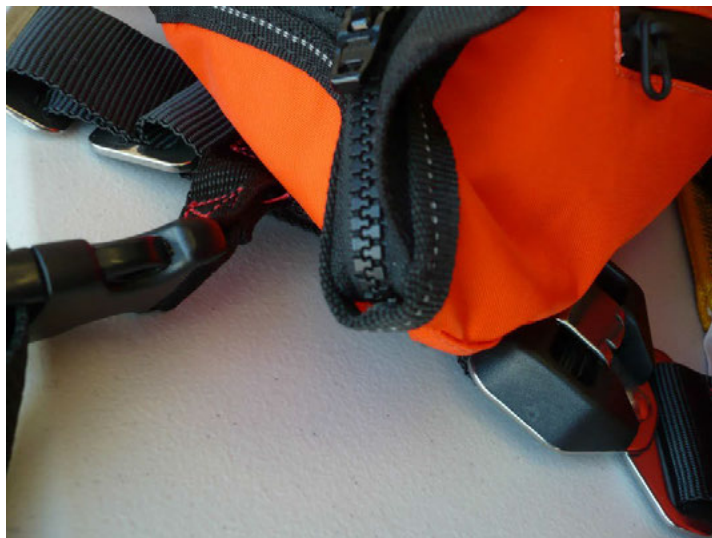


Figure 32

11. Carefully fold and insert the water sensor into the bottom corner of the jacket as shown (see Figure 33). This is important to ensure the water sensor deploys correctly in an emergency.



Figure 33

12. Fasten the zip just past the burst point (see Figure 34) and immediately close the Velcro tab (see Figure 35). Then bring the zip to the top of the CO2 cylinder (see Figure 36).



Figure 34



Figure 35

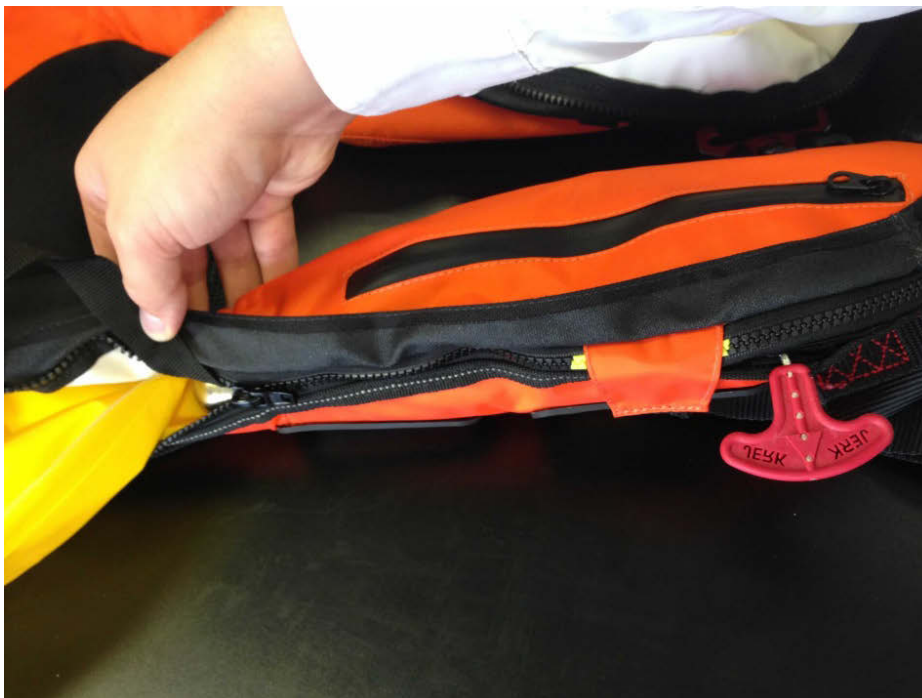


Figure 36

13. Move towards the spray hood and join the two Velcro tabs on the hood together (see Figure 37), then scrunch it up into a compact U shape (see Figure 38).



Figure 37

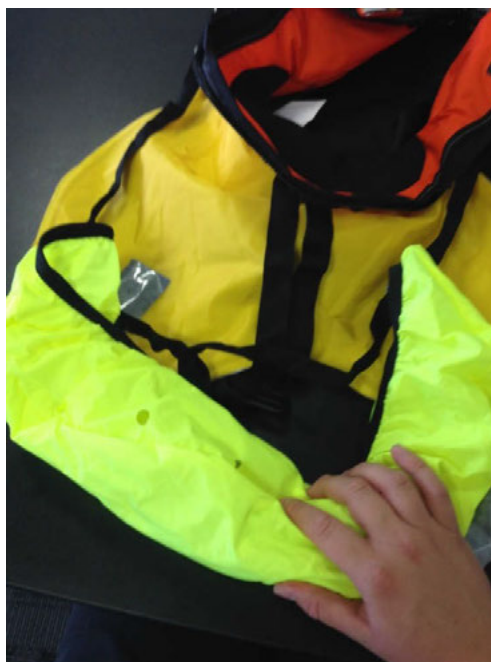


Figure 38

14. Fold the top of the bladder concertina style (see Figure 39) and lay the spray hood on top (see Figure 40).

IMPORTANT: Never roll the bladder when packing. Always flake/fold.



Figure 39



Figure 40

15. Pull the top of the cover over and hold in place (see Figure 41) then pull the zip all the way around the neck of the PFD until you reach the CO2 cylinder at the opposite side, tucking in the spray hood and bladder as you move along (see Figure 42).



Figure 41



Figure 42

16. Take the bottom of the left bladder (when worn) and fold it up in half (see Figure 43).



Figure 43

17. Take the left side (when facing) and fold in half (see Figure 44)



Figure 44

18. Take the whole of the bladder and fold in half once more making sure the operating unit is free and sitting on top (see Figure 45).



Figure 45

19. Open the Velcro access point below the yellow burst point and feed the manual activation handle through; fix to the access point using the Velcro tab on the handle (see Figure 46).
Note: ensure the Velcro tabs on the handle are positioned correctly.

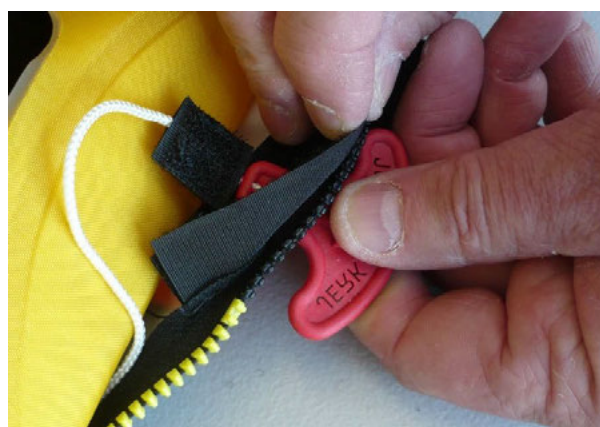


Figure 46

20. Pull the zip just past the burst point and close the Velcro tab (see Figure 47).



Figure 47

21. Zip to around 5cm from the end and stop. Turn the jacket over and tuck the ends of the zip into the jacket; you can use the waist strap access point to assist with this process (see Figure 48).



Figure 48

22. Close the zip fully and then push the zip to tuck it fully into the PFD (see Figure 49).



Figure 49

23. Turn down the storm flap all the way around the jacket (see Figure 50 and Figure 51).



Figure 50



Figure 51

24. Give the whole jacket a squeeze and press to even it out (see Figure 52).



Figure 52

25. Arm the MRT PLD (as per the instructions in the user manual available on www.mrtsos.com) and close the access zip (see Figure 53).



Figure 53

7.2 REPACKING THE SMRT 150N PFD

1. Make sure the quick release buckles are outside the cover and connected together as this will make the repacking easier (see Figure 54).



Figure 54

2. Ensure all residual air is removed from the bladder and neatly flatten out the deflated bladder on the workbench (see Figure 55).



Figure 55

3. Ensure the two dust caps are fitted and the whistle is in place (see Figure 56).

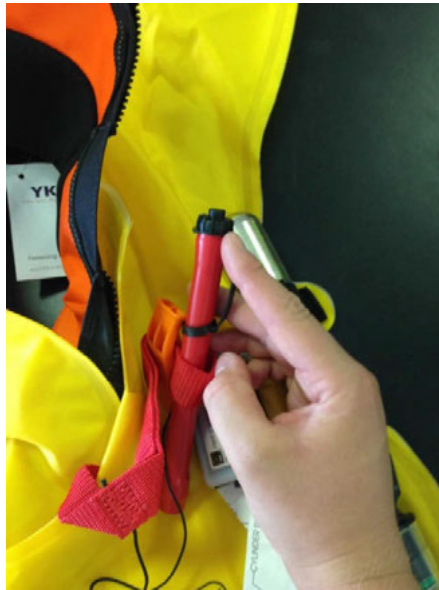


Figure 56

4. Ensure the light is securely in place. To secure the light, place the black T-clip under the Velcro strap and push the light into position onto the T-clip (see Figure 57 and Figure 58). Ensure the light switch is configured in the **Auto** position for automatic water activation (see Figure 59).

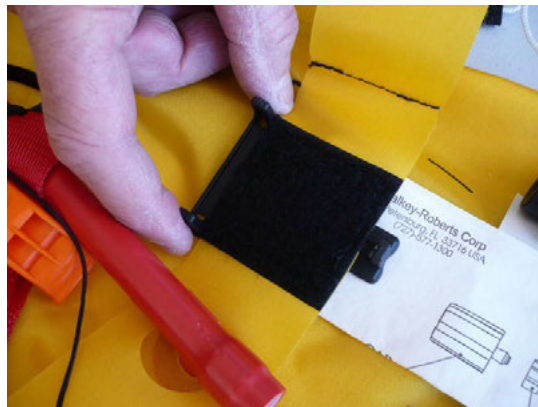


Figure 57



Figure 58



Figure 59

5. Clip the spray hood into the two clips at the top of the bladder and Velcro the pull cords to each of the CO2 cylinders where the other side of the Velcro is located (Figure 60 and Figure 61).



Figure 60



Figure 61

6. While facing the jacket, fold the bottom of the bladder upwards (see Figure 62). Then fold the right side of the bladder in half (see Figure 63). Now take the whole operating unit and lay it on top of the folded bladder (see Figure 64).



Figure 62



Figure 63

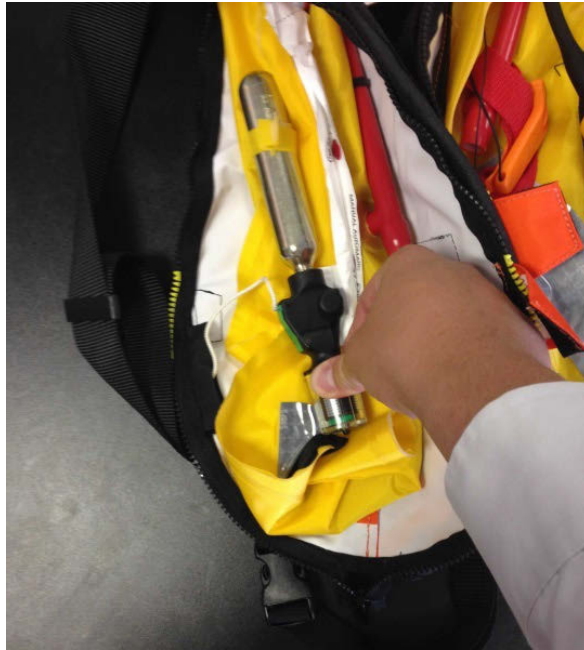


Figure 64

7. Fasten the zip just past the burst point (see Figure 65) and immediately close the Velcro tab (see Figure 66). Then bring the zip to the top of the CO2 cylinder (see Figure 67).



Figure 65



Figure 66



Figure 67

8. Move towards the spray hood and join the two Velcro tabs together (see Figure 68), then scrunch it up into a compact U shape (see Figure 69).



Figure 68

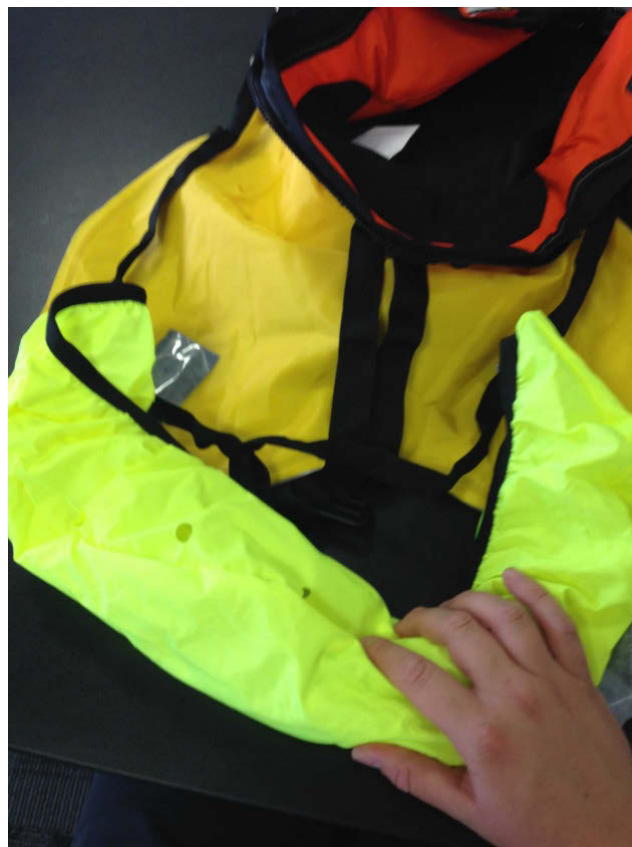


Figure 69

9. Fold the top of the bladder concertina style (see Figure 70) and lay the spray hood on top (see Figure 71).



Figure 70



Figure 71

10. Pull the top of the cover over and hold in place (see Figure 72) then pull the zip all the way around the neck of the PFD until you reach the CO2 cylinder at the opposite side, tucking in the spray hood and bladder as you move along (see Figure 73).



Figure 72



Figure 73

11. Clip the activation tab back in the sMRT V100 with the two holes at the top (see Figure 74).



Figure 74

12. Zip all the way to the end (see Figure 75) and tuck away both of the zips (see Figure 76).



Figure 75



Figure 76

13. Turn down the storm flap all the way around the jacket (see Figure 77 and Figure 78).



Figure 77



Figure 78

14. Give the whole jacket a squeeze and press to even it out (see Figure 79).

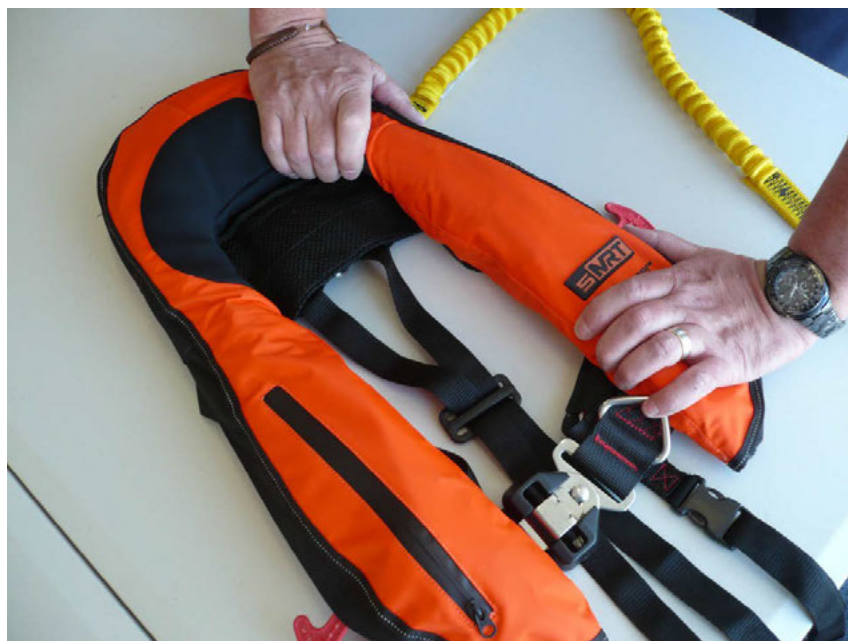


Figure 79

15. Open the front access zip and make sure you can see the sMRT V100. If not then move it so that it is visible (see Figure 80).

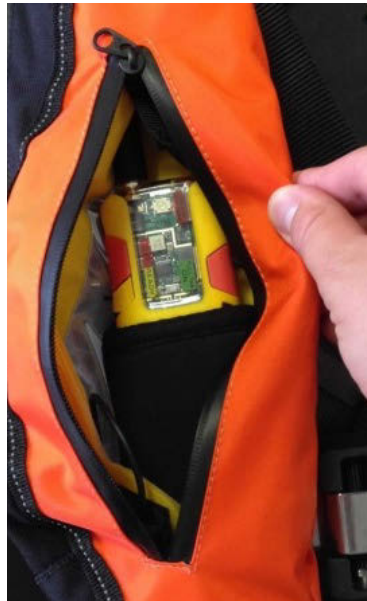


Figure 80

8 MAINTENANCE AND STORAGE OF THE PFD

A full SOLAS approved service must be performed on the PFD every 12 months. This procedure must be completed by MRT or an MRT approved service centre using the procedure outlined in the sMRT PFD Service Manual.

8.1 CLEANING AND STORAGE

To clean the PFD wash or sponge it down with warm, soapy fresh water. Rinse the PFD with clean water and wipe dry using a soft and clean cloth. To avoid inflation, do not submerge the PFD. Hang the PFD on a plastic coat hanger to dry it fully. Do not dry clean the PFD.

Always store your PFD in a warm, dry place out of direct sunlight and not exposed to the elements.