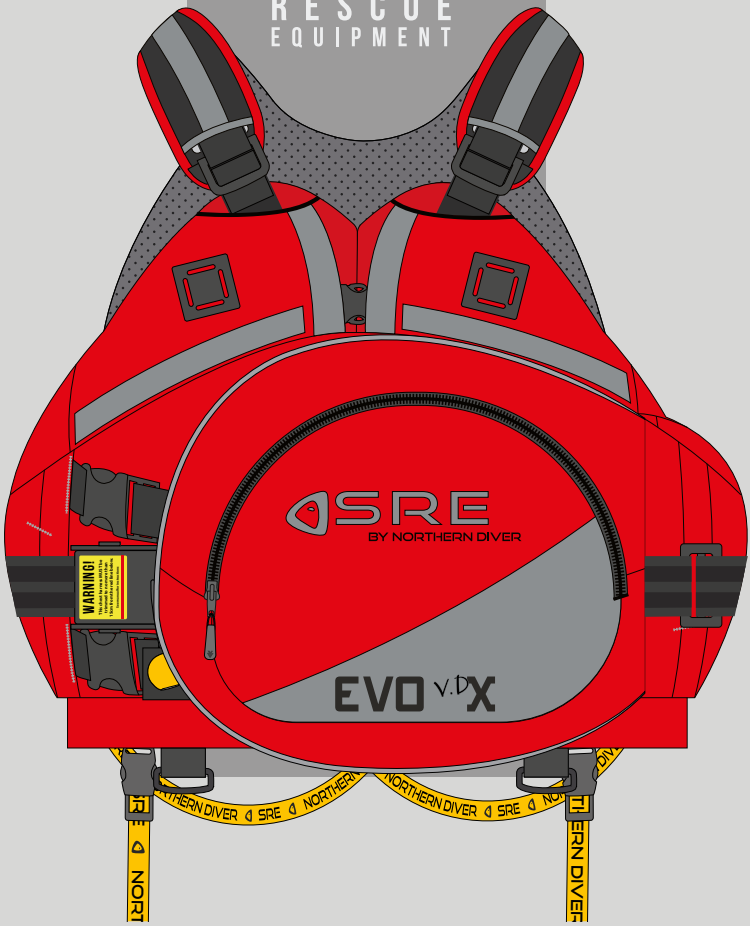
SPECIALIST
RESCUE
EQUIPMENT



ARCTIC SURVIVOR

EVO X

NORTHERN DIVER PFD USER MANUAL

Thank You.

Thanks for purchasing this Northern Diver Arctic Survivor Evo X PFD. To help ensure your future safety, do not use this product before reading this manual. It is important to fully understand its proper handling for safe usage.

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Evo Pro X.

Application specific PFD
Swift Water Rescue
Product code: PFD-EVOX-SIZE

PFD can be used in all river, lake and ocean environments including aerated moving water, flood waters and surf.

Using a personal flotation device (PFD) helps reduce the risk for workers who fall into water or who have to evacuate their vessel in an emergency.

Certification.

EN ISO 12402-5:2020
EN ISO 12402-6:2020
PPE Regulation (EU) 2016/425

Vojenský technický ústav, s.p.,
Mladoboleslavská 944, Kbely,
197 00 Praha 9,
Czech Republic,
Notified Body 2452

Safety Warnings.

This PFD is fitted with a chest release harness and should only be used by personnel who have received the appropriate training by a qualified instructor.

The quick release harness is not to be used in conjunction with any other harness.

Before use, ensure your PFD is the correct size. Do not use if the PFD is either too large or too small. Please adjust your PFD correctly as per the instructions shown in this user manual.

We recommend asking a buddy to check your PFD before entering the water.

Do not attach your cowtail and carabiner to any webbing that is permanently fixed to the PFD. If you are using a carabiner to attach to the back of the PFD rather than a fixed ring, please ensure that you use a locking type carabiner to avoid accidental hook up which could affect your positioning and stability in fast moving water.

Be aware of fast flowing aerated water, which reduces the effective buoyancy.

Ensure support is redily available for you (the wearer) and the person being rescued.

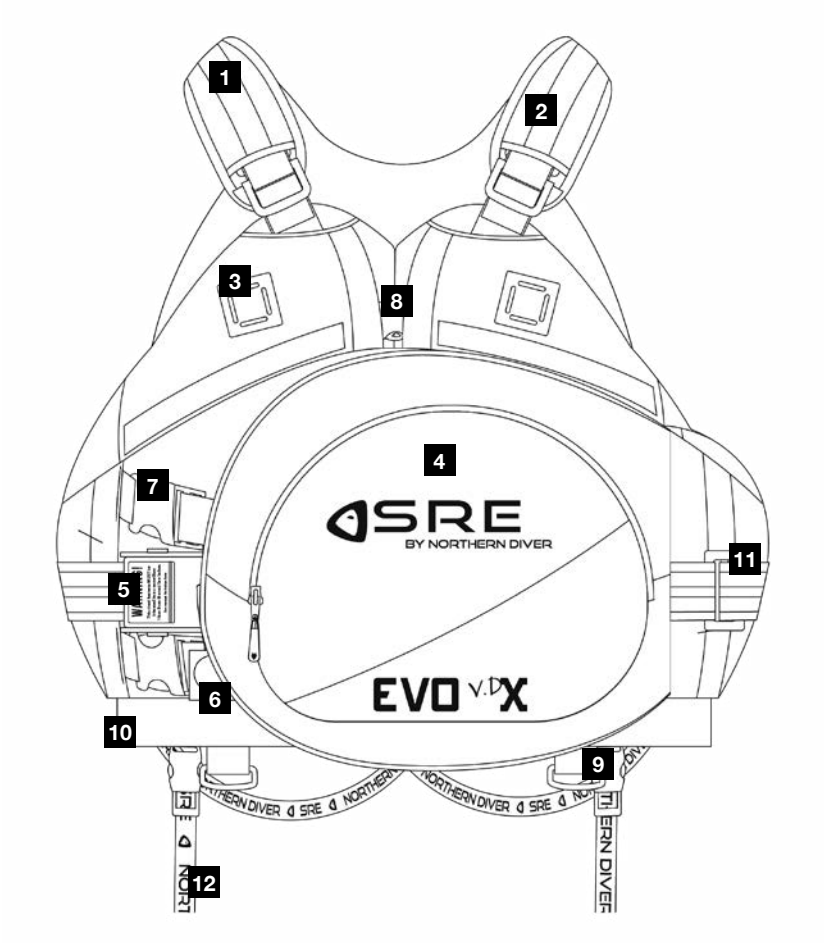
Consider the manoeuvrability needed to perform any rescue operations.

Document downloads.

To download this user manual please visit www.ndiver-rescue.com, visit the specific product page for the PFD and click on documents.

To download an certificates of comformity that are available with this product please visit www.ndiver-rescue.com, visit the specific product page for the PFD and click on documents.

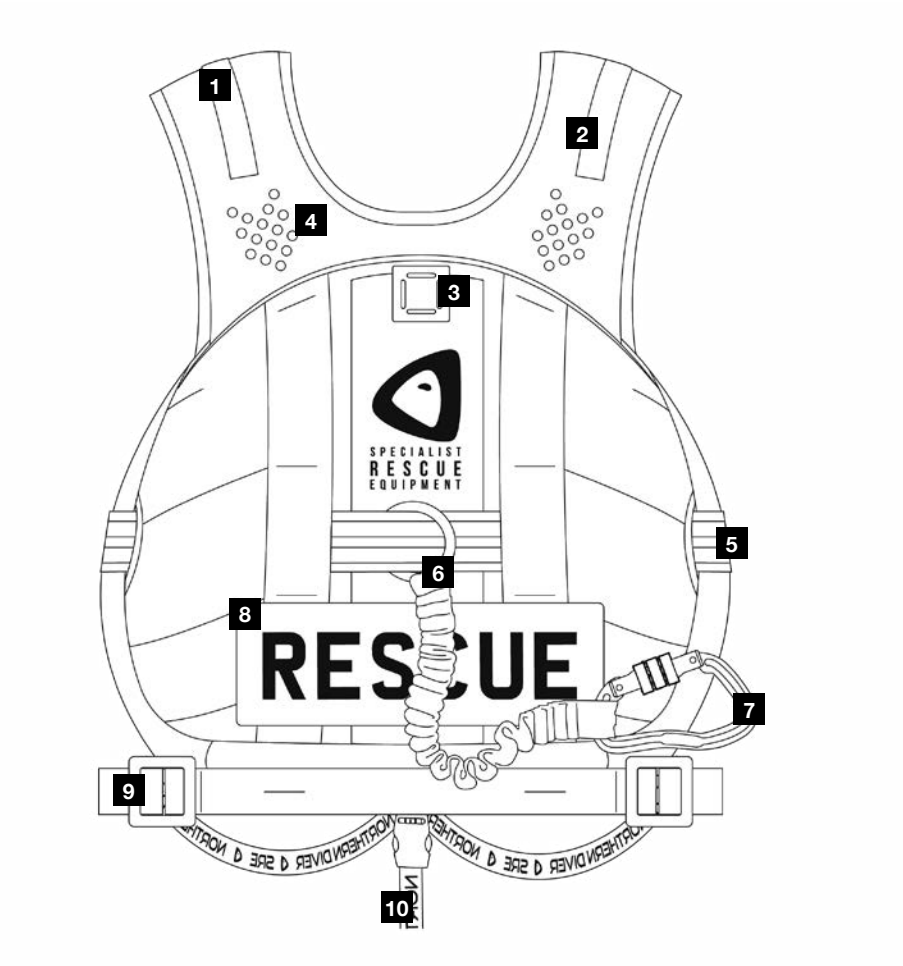
Front view features.



01. Adjustable shoulder straps
02. Reflexite® prismatic banding
03. 4-way lash tabs (3)
04. Front zipped pouch with SOS whistle
05. Adjustable quick release chest harness
06. Easy pull toggle
07. Quick release buckles (2)
08. Chest buckle
09. D-buckles (3)
10. Anti-slip waist band
11. Sleek sliplock buckle
12. Removable crotch straps

Illustration is only for reference as a guide and may differ from PFD you have purchased.

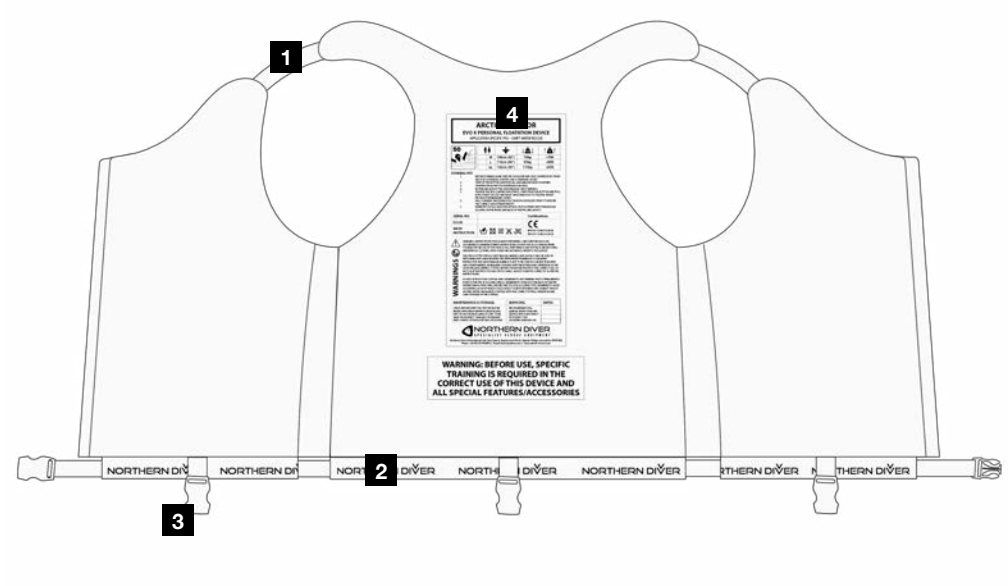
Back view features.



01. Adjustable shoulder straps
02. Reflexite® prismatic banding
03. 4-way lash tabs (3)
04. Additional TPU shoulder protection
05. Adjustable quick release chest harness
06. Cowtail and stainless steel O-ring
07. Dual lock carabiner
08. Removable encapsulated panel
09. Anti-slip waist band
10. Removable crotch straps

Illustration is only for reference as a guide and may differ from PFD you have purchased.

Inside view features.



01. Adjustable shoulder straps
02. Waist band
03. Quick release buckles for crotch straps
04. Internal label

Illustration is only for reference as a guide and may differ from PFD you have purchased.

Fabric construction.

Outer fabric
Type: 400D ripstop nylon
Colour: red
Tested in accordance with
EN ISO 12402-7:2006+A1:2010

Inner lining
Type: 200D nylon
Colour: black
Tested in accordance with
EN ISO 12402-7:09/2006
EN ISO 12402/prA1 08/2007

Interna
Type: buoyant foam & sandwich mesh
Tested in accordance with
EN ISO 12402-7:2006/A1:2011 (D)

NOTE!
This product has undergone fire resistant testing in accordance with EN ISO 12402-9:2020

Internal label information.

ARCTIC SURVIVOR

EVO X PERSONAL FLOATATION DEVICE

APPLICATION-SPECIFIC PFD – SWIFT WATER RESCUE

			KG	N
	XS/S	91cm (36”)	68kg	>70N
	M	106cm (42”)	76kg	>70N
	L	116cm (46”)	95kg	>80N
	XL	142cm (56”)	115kg	>85N

DONNING PFD

1. BEFORE DONNING MAKE SURE THE SHOULDER AND SIDE COMPRESSION STRAPS ARE FULLY EXTENDED. DON PFD LIKE A STANDARD JACKET.
2. START AT THE BOTTOM AND PUSH ALL AVAILABLE BUCKLES TOGETHER.
3. STARTING FROM THE TOP, TIGHTEN EACH BUCKLE.
4. FASTEN AND ADJUST THE QUICK RELEASE CHEST HARNESS.
5. TIGHTEN THE SIDE COMPRESSION STRAPS. START FROM THE BOTTOM AND PULL BOTH STRAPS ON LEFT AND RIGHT SIMULTANEOUSLY TO TIGHTEN. REPEAT PROCESS FOR REMAINING STRAPS.
6. PULL FORWARD SIMULTANEOUSLY ON BOTH SHOULDER STRAPS TO ENSURE THE CORRECT ADJUSTMENT AND FIT.
7. WHEN PFD IS FULLY ADJUSTED ATTACH CROTCH STRAPS INTO THE BUCKLES LOCATED ON THE FRONT AND BACK OF THE PFD AND ADJUST.

SERIAL NO.	
D.O.M	
WASH INSTRUCTION.	

Certifications.
CE EN ISO 12402-5:2020 EN ISO 12402-6:2020

WARNINGS

WARNING: LIMITED PROTECTION AGAINST DROWNING. CHECK BEFORE EACH USE ACCORDING TO MANUFACTURER'S INSTRUCTIONS. DO NOT USE AS A CUSHION. TRAIN YOURSELF IN THE USE OF THIS DEVICE. FULL PERFORMACE MAY NOT BE ACHIEVED USING WATERPROOF CLOTHING OR IN OTHER CIRCUMSTANCES. REFER TO THE LEAFLET.

THIS PFD IS FITTED WITH A CHEST RELEASE HARNESS AND SHOULD ONLY BE USED BY PERSONNEL WHO HAVE RECEIVED THE APPROPRIATE TRAINING BY A QUALIFIED INSTRUCTOR. THE QUICK RELEASE HARNESS IS NOT TO BE USED IN CONJUNCTION WITH ANY OTHER HARNESS. FAMILIARIZE YOURSELF WITH THE FITTING AND OPERATION OF THE QUICK RELEASE HARNESS SYSTEM. BEFORE USE ENSURE THE PFD IS THE CORRECT SIZE. DO NOT USE IF THE PFD IS TOO BIG OR TOO SMALL. ADJUST YOUR PFD CORRECTLY AS PER THE INSTRUCTIONS.

DO NOT ATTACH YOUR COWTAIL AND CARABINER TO ANY WEBBING THAT IS PERMANENTLY FIXED TO THE PFD. IF YOU ARE USING A CARABINER TO ATTACH TO THE BACK OF THE PFD RATHER THAN A FIXED RING, ENSURE THAT YOU USE A LOCKING TYPE CARABINER TO AVOID ACCIDENTAL HOOK UP WHICH COULD AFFECT YOUR POSITIONING AND STABILITY IN FAST MOVING WATER. FAMILIARIZE YOURSELF WITH THE CORRECT FITTING, OPERATION AND SAFE STOWAGE OF THE COWTAIL.

MAINTENANCE & STORAGE.	SERVICING.	DATES.
CHECK BEFORE EVERY USE. PFD SHOULD BE RINSED WITH FRESH WATER TO REMOVE ANY DIRT OR SALT RESIDUE. HANG TO DRY. STORE AWAY FROM DIRECT SUNLIGHT OR RADIANT HEAT SOURCE. STOW IN A KIT BAG OR LOCKER.	RECOMMENDED FULL ANNUAL INSPECTION AND SERVICE WITH A BUOYANCY TEST EVERY 5 YRS ASSUMING AVERAGE USE.	

NORTHERN DIVER
SPECIALIST RESCUE EQUIPMENT

Northern Diver International Ltd, East Quarry, Appley Lane North, Appley Bridge, Lancashire, WN6 9AE
Phone +44 (0)1257254444 | Email rescue@ndiver.com | www.ndiver-rescue.com

Please check your PFD label for product specific details.

The label inside the PFD you have purchased will look similar to the one illustrated.

The label will give instructions for use and sizing information specific to that PFD.

It is vital that your PFD is correctly adjusted to fit you properly. An incorrectly fitted PFD or fastening will impair performance and may lead to the PFD slipping or moving when worn in the water.

Do not try to repair any damage to the PFD yourself as this could potentially cause more damage and render the PFD irreparable and void the warranty.

You must consider factors such as the following to determine what buoyancy to look for in your PFD:
(1) Fast flowing aerated water, which reduces the effective buoyancy
(2) Support needed for both the wearer and the person being rescued
(3) The manoeuvrability needed to perform the rescue functions
(4) Any additional equipment worn

WARNING: BEFORE USE, SPECIFIC TRAINING IS REQUIRED IN THE CORRECT USE OF THIS DEVICE AND ALL SPECIAL FEATURES/ACCESSORIES

Pre-fitting the cowtail.

The cowtail is supplied fitted to every PFD purchased from Northern Diver, however should you need to re-fit the cowtail, please proceed as instructed below.

Open the cam buckle on the chest harness (this is the buckle with the yellow toggle attached) and unthread the chest harness through the webbing loops on the PFD.

To ensure the cowtail is fitted in the correct position the stainless steel o-ring must be threaded through the chest harness and be positioned between the two webbing loops on the back of the PFD (illustrated left).

To finish fitting make sure the chest harness is threaded through **ALL** webbing loops of the PFD.

Stowing the cowtail.

When the cowtail is not being used you must ensure you clip the carabiner onto the chest harness (illustrated left). This helps prevent the cam buckle from opening and the chest harness and cowtail from being released.

Although unlikely, it is possible for the cowtail or chest harness to become entangled this can prevent easy release. Adequate training and experience in the use of a cowtail tethered PFD is essential.

Do not use if you are not qualified. Do not attach the cowtail or carabiner to any webbing that is permanently fixed to the PFD.

WARNING

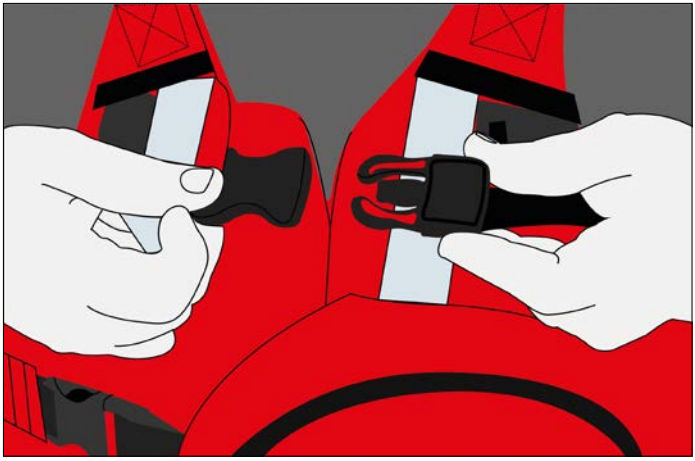
Pulling on the yellow toggle that is attached to the cam belt will release the cowtail. Do not use PFD if you are not qualified. Do not attach the cowtail or carabiner to any webbing that is permanently fixed to the PFD.

If you are using a carabiner to attach to the back of the PFD rather than a fixed stainless steel o-ring, please ensure that you use a screw-gate type carabiner to avoid accidental hook up which could affect your positioning and stability in fast moving water.

Familiarize yourself with the correct fitting, operation and safe stowage of the cowtail.

Donning instructions.

To ensure the correct fitting please perform the following steps.

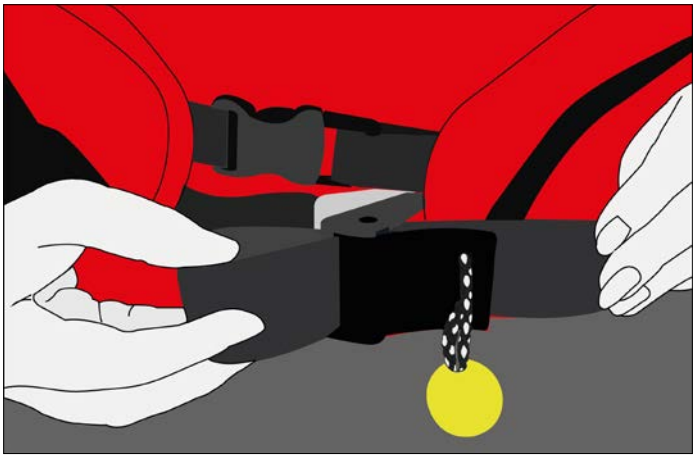


Prior to putting on, ensure all straps, including the shoulder straps, are extended to their maximum length.

Starting from the bottom and working upwards, clip the quick release buckles into place.

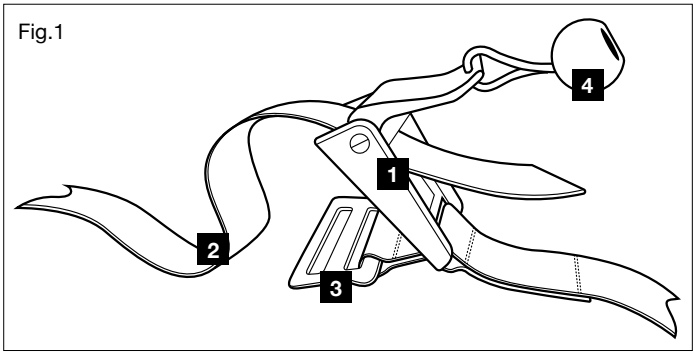
Once the quick release buckles are closed ensure they are tightened. Do this by holding the plastic buckle in one hand and pulling the webbing strap, with the other hand, in the opposite direction to tighten and achieve a good fit.

Adjusting the quick release harness.



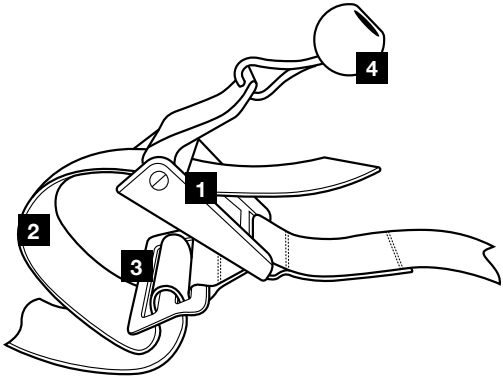
For in water rescue operations
Thread the webbing through the plastic quick release buckle. MUST be threaded as shown in Fig.1.

For bank based operations and belaying.
Thread the webbing through both the plastic quick release buckle and metal back-buckle to prevent the harness slipping under load. MUST be threaded as shown in Fig.2.



1. Quick release plastic buckle
2. Chest harness webbing belt
3. Metal back-buckle
4. Quick release pull toggle

Fig.2



1. Quick release plastic buckle
2. Chest harness webbing belt
3. Metal back-buckle
4. Quick release pull toggle

Important.

Close the buckle firmly.

Check that the webbing is not twisted during threading.

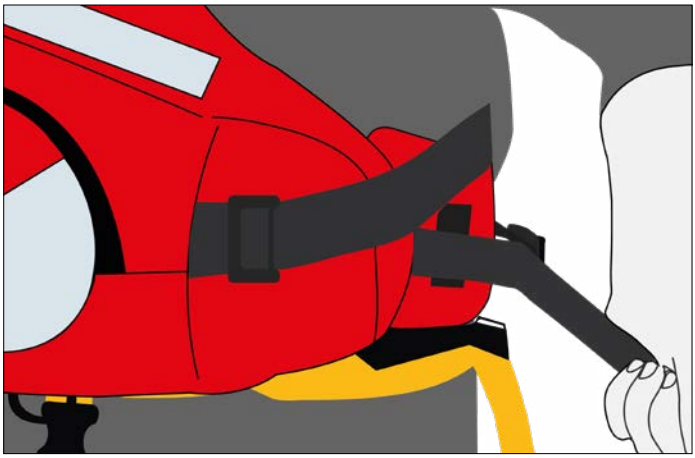
We recommend that the webbing tail end should only be trimmed if the PFD has one user. Trimming the webbing tail can cause problems if the PFD is has multiple users.

If the webbing tail end seems to be essessively long then you should check the sizing of your PFD as you may be wearing the wrong size.

When trimming the webbing on the harness you must take care to leave a clean edge with no lip or residue. This is to ensure there is no restriction for the webbing when it is released through the plastic quick release buckle.

Familiarize yourself with the fitting and operation of the quick release harness system.

Adjusting the side compression straps.

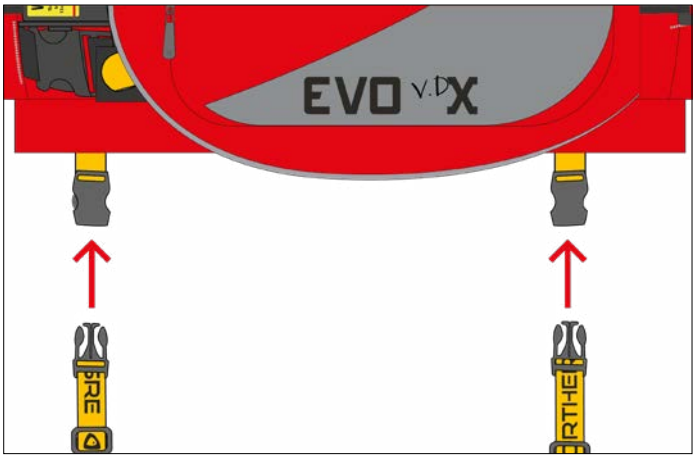


To ensure the PFD is fitted correctly tighten the compression straps on each side of the PFD. Starting from the bottom, place your hand on each of the side webbing straps and simultaneously pull each one forward to tighten. Repeat this process for all side webbing straps.

Adjusting the shoulder straps.

Next, locate the adjustable webbing straps on both shoulders and simultaneously pull each one forward to ensure the correct adjustment and fit. Having followed these steps, the PFD should now fit close to the body.

Attaching crotch straps.



Finally, attach the crotch strap buckles into place and adjust until it is comfortable.

WARNING
Although Northern Diver reccomends using the PFD with the crotch straps attached it can be used with crotch straps removed depending on your own/organistaions risk assesment and operating procedures.

Removing the PFD.

To remove the PFD, reverse the procedures for donning PFD. In an emergency situation, you will note that the quick release belts are designed for one-handed release, simply squeeze the red button on the buckle.

If the PFD is only for your personal use you can leave all webbing straps set to the adjusted lengths.

Care and maintenance.

It is recommended that you regularly inspect your personal flotation device including the buckles, stitching, webbing tears, abrasion, UV damage and the outer fabric cover for any signs of excessive wear or damage. A visual inspection should be completed every 6 months.

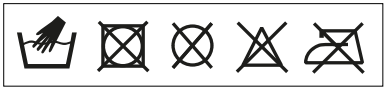
A full annual inspection is recommended as part of any standard operational procedure. If any significant damage if found, the PFD should be returned to Northern Diver for further inspection to the address shown.

Following use the PFD should be rinsed with fresh water to remove any dirt or salt residue, which could potentially cause premature wear. If the PFD has been exposed to contamination, please contact Northern Diver for details of what products are recommended to de-sanitise the PFD.

Hang to dry thoroughly and store away in a well ventilated area to prevent mould growing on the PFD. Keep out of direct sunlight or any radiant heat source (prolonged exposure to sunlight will deteriorate the fabric). Store in a suitable kit bag or locker.

It is recommended that following 5 years of use the PFD should have a buoyancy test.

The recommended product life span is 10 years from the date of issue.



Wash icons left to right:
Hand wash only, do not tumble dry, do not dry clean, do not bleach, do not iron.

IMPORTANT
Do not crush the PFD when storing. The foam will deform over time if heavy objects are placed on top. Do not machine wash. Do not dry clean.

For PFD testing and servicing, please contact craig@ndiver.com for further information.

It is recommended that following 5 years of use the PFD should have a buoyancy test.

The recommended product life span is 10 years from the date of issue.

FAO. Specialist Rescue Equipment
Northern Diver International Ltd
East Quarry
Appley Lane North
Appley Bridge
Wigan, UK
WN6 9AE

PFD's have a 12 months warranty.
Terms & conditions may apply contact us for further details.

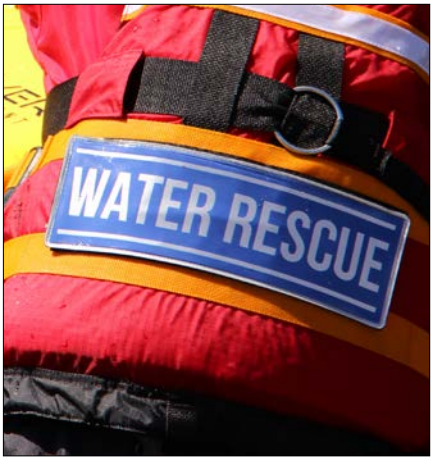
Identification and service record.

Visually inspect the PFD at the beginning of each use.

MODEL:	
DATE:	SERIAL NUMBER:
OWNER'S NAME:	

SERVICE NAME	NEXT SERVICE DATE	AUTHORIZED FACILITY STAMP

PFD accessories.



ENCAPSULATED PANELS
Available with standard wording, for example, RESCUE, POLICE, WATER RESCUE or can be customised with team names and/or artwork.

Hook Velcro is fixed to the back, to allow the badge to be removed from any object that has the loop fastener fitted.

3 sizes of encapsulated panel are available
(L) 300*100mm (11.8*3.9”)
(M) 240*100mm (9.4*3.9”)
(S) 50*150mm (2*5.9”)

MOQ: 15 PIECES

COWTAIL
CODE: PFD-COWS-TAIL-COLOUR
Unstretched: 500mm (19.7”)
Stretched 950mm (37.4”)
Colour: black or yellow

DUAL LOCK CARABINER
CODE: CARABINER-BLUE-SILVER
MSS 26kN
EN 12275:2013
EN 362:2004/B

CROTCH STRAPS
CODE: PFD-CROTCH STRAPS
One (adjustable)
25mm wide webbing
Colour: black or yellow

RETRACTABLE CORD
CODE: PFD-RETRACTABLE-CORD
One size with snap hook at one end to fasten to PPE

PEA-LESS MARINE WHISTLE
CODE: WHISTLE
EN394 ISO12402
100+ decibel sound

FLEXI-LIGHT POCKET
CODE: POCKET-FLEXILIGHT
150*50*30mm (5.9*1.9*1.2”)
With velcro attachment strap

LUG POUCH
CODE: LUG POUCH

Securely fits to Velcro panels
Accessible storage without adding cumbersome to jacket
Space to fit custom removable panel
Loop for easy & quick one-handed removal
Large interior space with split compartment
Mesh exterior removes the risk of any water build up
Size: 305*160*40mm (12*6.3*1.6") approx.

LUG POUCH STORAGE BAG
CODE: LUG POUCH BAG

Easy loading & storage of multiple pouches
Quickly accessible
Space for 8 Lug Pouches
25mm (0.9") strong webbing carry handles
316 stainless steel snaphook clips & D-rings
Folds to a compact, transportable size
Size: 700*750mm (27.6*29.5") approx.

Versatile piece of safety kit that rolls up compactly and fits neatly in PFD front pocket. Ideal for use in rescue situations.
Materials: 25mm (0.9") nylon tape

4m (13'1) SAFETY SLING
CODE: SAFETY-SLING-4M-RED
Used as a towing sling or anchor
Two sewn end loops
Weight: 146g | Bright red colour

5M (16'4) RESCUE TAPE
CODE: SAFETY-TAPE-5M-YELL
One sewn end loop
Weight: 188g
High vis yellow colour

VISIT
www.ndiver-rescue.com

CONTACT
Tel: +44 (0) 1257 25 44 44
Email: rescue@ndiver.com

HEAD OFFICE
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WN6 9AE, UK