

Hutchwilco

INFLATABLE PFD'S

INSTRUCTIONS FOR ANNUAL SERVICE AND SELF INSPECTION

Applicable for PFDs in recreational use only, for PFD's in commercial use inspections should only be performed by an accredited agent.

BEFORE YOU START

1. Carefully read over all the instructions below
2. Ensure you have spare parts for your PFD. (See 'rearming kits for Hutchwilco PFDs' in on the Hutchwilco website)
On inflator heads that use a green indicator clip to retain the manual firing lever, the clip will be broken during inspection. Ensure you have spare clips before you begin inspection. You may also need to replace the CO2 cylinder and on automatic models the cartridge/bobbin. All these parts can be purchased through a Hutchwilco retailer or service agent.
3. Ensure you have access to accurate kitchen or letter scales for checking the weight of the CO2 cylinder.
4. Print a copy of the Inflatable PFD self inspection certificate for every PFD being inspected
5. Record on the certificate the PFDs serial/PI number, model no., inflator head brand / type (manual or automatic) and last service date.

Record each inspection step as it is completed with a **PASS**, **FAIL** or **NA** in check boxes provided on the certificate. If the PFD or a component fails any inspection step 1 through 6, the PFD or faulty component must be replaced before using the PFD, alternatively send the PFD to an accredited service agent for further test.

Under no circumstances must you attempt any repairs, these must only be conducted by trained service personnel.

STEP 1. GENERAL INSPECTION

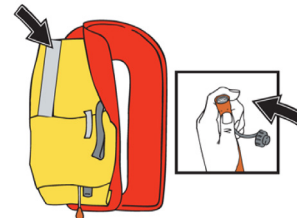
1.1 External Inspection - Check

- a) Cover has no excessive wear or visible damage.
- b) All cover closures (hook and loop, zippers etc) are serviceable.
- c) There is no visible damage or wear to any straps or stitching.
- d) All fastenings, adjustments and buckles are operating correctly.
- e) Safety lanyard attachment ring (when fitted) is not worn or damaged.



1.2 Internal Inspection - Open cover and check

- a) retro-reflective tape is firmly attached and not damaged.
- b) Lifting becket webbing and stitching is not worn or damaged.
- c) Whistle operation (blow to check operation) and that whistle is securely attached.
- d) Oral inflation tube has no visible signs of damage.
- e) If fitted with emergency light check lights expiry date (replace if expired).



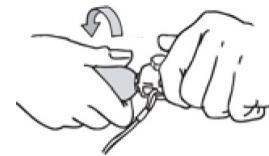
STEP 2. INSPECTION OF LUNG AND ORAL VALVE

2.1 Check lung has no signs of excessive abrasion or wear.

Pay extra attention to the folds and areas around inflation systems

2.2 a) Remove Co2 cylinder from the inflator head by unscrewing the cylinder anti-clockwise.

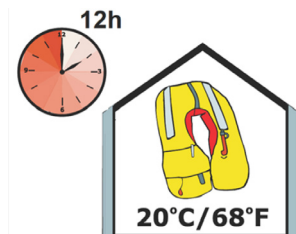
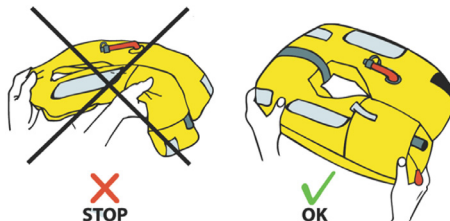
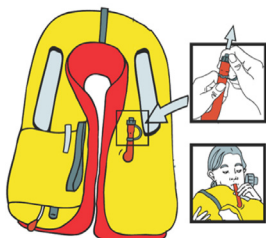
On models fitted with a UML Pro Sensor inflator head check that the manual indicator status (top window) is red once cylinder has been removed. The Pro Sensor manual indicator status window should only show green when an unpierced CO2 cylinder is fitted correctly.



b) Inflate lung using the oral inflation tube.

c) Leave lung inflated with oral tube cap off in a room with a stable temperature of around 20oC for at least 12 hours (temperature changes will affect lung pressure)

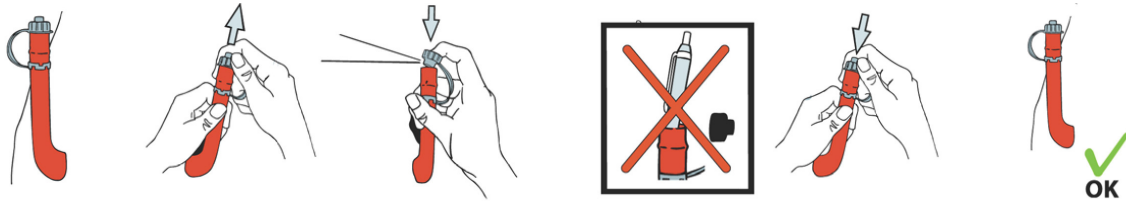
d) After 12 hours check there is no loss of pressure and no visible damage to lung. If lung is damaged or pressure falls the PFD must be replaced or sent to an accredited service station for further tests. Under no circumstances should you attempt to repair the PFD yourself



STEP 2. INSPECTION OF LUNG AND ORAL VALVE - Continued

2.3 Deflate inflatable lung checking operation of oral inflation valve. Only deflate lung by inverting the oral tube cap and gently pressing the top of the inverted cap down into tube.

Do not put anything other than the inverted cap into the oral inflation tube, foreign objects may damage the oral valve. When the lung is fully deflated fit the oral tube cap back into its normal position.

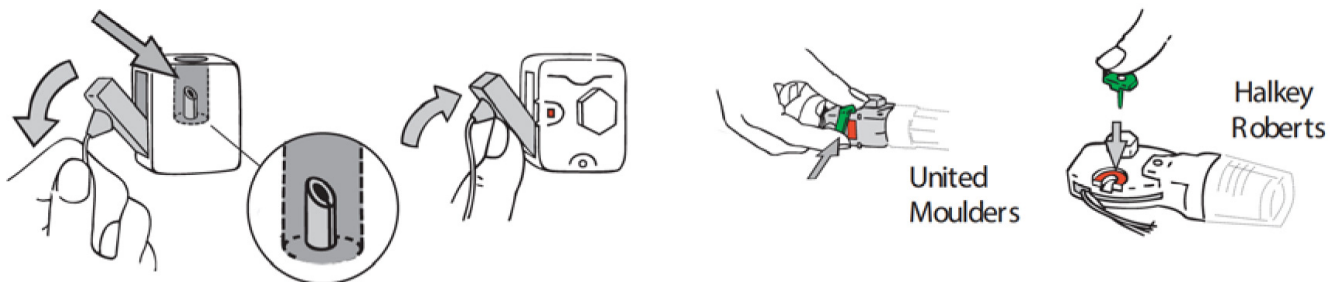


STEP 3. EXAMINE OPERATION OF MANUAL INFLATOR *(applicable for all inflator heads)*

3.1 With CO2 cylinder removed pull manual firing lanyard down sharply to ensure lever moves freely and that the piercing cutter becomes proud of the sealing washer at base of the upper threaded section. On inflator heads where the lever is secured by a green indicator clip this action will break the indicator clip. If lever moves freely and piercing cutter becomes proud fold lever back up into normal position.

3.2 On inflator heads that use an indicator clip to secure the lever, fit a new green indicator clip now.

If the manual inflator does not operate properly the PFD must be replaced or sent to an accredited service agent for further action.



STEP 4. INSPECTION AND REARMING AUTOMATIC INFLATOR *(automatic inflation models only)*

The automatic activation mechanism (Cartridge or bobbin as applicable) must be replaced if it has been immersed in water, is past its expiry date or if the expiry date falls before the PFDs next scheduled service.

Do not refit a Co2 cylinder unless the automatic valve is correctly armed.

4.1 For models using United Molders automatic inflators fitted with water sensing cartridge (Fig 1.)

a) Unscrew the cartridge anti clockwise.

On models fitted with UML Pro Sensor inflator head the automatic indicator status (bottom window) should be red when the water sensing cartridge has been removed or activated. The Pro Sensor automatic indicator window should only show green when an armed cartridge is correctly fitted.

b) Check that the cartridge is clean and completely dry

c) Record the expiry / replace by dates printed on cartridge on the service inspection certificate and check the green indicator status disc at base of cartridge is visible. Discard and replace with new cartridge if expiry / replace by date falls before next service due date or the green status indicator disc at the base of cartridge is not visible

d) Rearm by screwing cartridge clockwise onto base of inflator head. Tighten firmly by light hand force only (use no tools) Ensure thread is not obstructed and that green automatic status indicators are visible.



Fig 1. United Molders automatic inflation head.

STEP 4. INSPECTION AND REARMING AUTOMATIC INFLATOR - Continued

4.2 For models using Halkey Roberts automatic inflator with transparent head and water sensing bobbin (Fig 2.).

- Check green indicator is showing at base of the transparent head. If indicator is showing red the water sensing bobbin has been activated and should be replaced.
- Remove water sensing bobbin by unscrewing transparent head anti clockwise. The Halkey Roberts water sensing bobbin has a 4 year expiry and is printed with the date of manufacture (Month, Day, and Year). Calculate when bobbin replacement is due by adding 4 years onto date of manufacture. Discard and replace bobbin if indicator at base of transparent head is red (refer 5.2.a) or the bobbin expiry date falls before the PFDs next service due date.
- Record the bobbin expiry / replacement date on service inspection certificate
- Rearm automatic firing mechanism by fitting the bobbin onto base of the inflator head (white side facing away from head) and reinstalling the transparent head (screw clockwise by light hand force until tight). Ensure thread is not obstructed and automatic status indicator at base of transparent head is green.

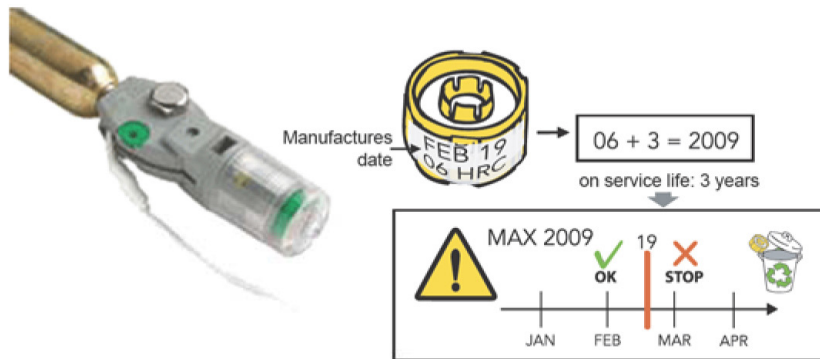


Fig 2. Halkey Roberts automatic inflation head
The water sensing bobbin is inside the transparent cartridge

STEP 5. INSPECTION OF CO2 CYLINDER

5.1 Check that the size / type of CO2 cylinder is correct for the PFD

The Cylinder size is displayed on the cylinder as well as on the PFD lung adjacent to the CO2 inflator head.

5.2 Check that the CO2 cylinder is not damaged, is free from rust and corrosion and has not been pierced. Replace any cylinder that is pierced, damaged or exhibiting any signs of rust or corrosion.

5.3 If cylinder is serviceable (refer 5.2) weigh the cylinder on kitchen or letter scales. The cylinders weight should correspond to MIN.GR.WT engraved on cylinder +/- 2 g. Record MIN.GR.WT and actual weight of cylinder on the inspection certificate.



Make sure that all scraped CO2 cylinders are disposed of at once.

STEP 6. REFIT CO2 CYLINDER

6.1 Confirm

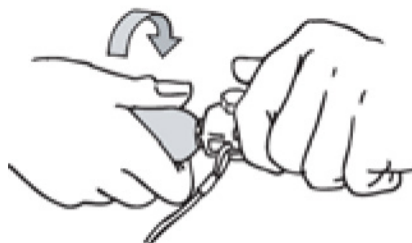
- manual inflator mechanism has passed inspection step 3
- On automatic models that the automatic valve is armed and has passed inspection step 4.
- the CO2 cylinder being fitted has passed inspection step 5

6.2 To refit cylinder hold the inflator head firmly and screw the CO2 cylinder clockwise into top of inflator head. Hand tighten until firm.

Do not use any tools or undue force

Note: For the piercing cutter to work correctly the CO2 cylinder (and automatic inflation mechanism on automatic models) must be firmly hand tightened onto the CO2 inflator head.

On UML Pro Sensor inflator heads the PFD is fully armed only when all indicator status windows are green.



STEP 7. RECORD SERVICE INSPECTION ON PFD

7.1 If PFD has passed all applicable self inspection steps 1 through 6 above Sign and date in permanent laundry marker the service inspection history label located on inflator head side of lung. For a Self inspection prefix the service date by the letters **SI** to indicate 'self inspection'. The date format should be kept consistent across the PFDs service inspection history.

STEP 8. REPACK PFD

8.1 Repack PFD according to instructions provided in your PFDs owners manual.

Ensure that the manual inflation pull lanyard and knob is not tangled and that it is accessible when PFD is donned.

STEP 8. CERTIFY THE PFD SELF INSPECTION CERTIFICATE

9.1 Sign self inspection certificate and record date self inspection was completed. It is also recommended that next inspection due date is noted on the certificate. The completed self inspection certificate should be kept in boats safety equipment log for future reference.

PLEASE FIND THE SELF INSPECTION CERTIFICATE ON THE LAST PAGE



HUTCHWILCO INFLATABLE PFD SELF INSPECTION CERTIFICATE

Applicable for Hutchwilco inflatable PFDs in recreational use only

BEFORE YOU START: Carefully read Hutchwilco Inflatable PFDs Instructions for Service and Annual Self Inspection. Record result of each inspection step when completed with a 'PASS', 'FAIL' or 'NA' as applicable in the spaces provided on this certificate. If a PFD fails any inspection step 1- 6 the PFD or faulty component must be replaced before use.

Alternatively the PFD should be sent to an accredited service agent for further testing.

Under no circumstances must you attempt any repairs yourself.

Serial / PI No.		Last service date (date of purchase if 1st service)	MM	YY
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PFD Model		Inflator head brand + type (manual or automatic)	
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STEP 1. GENERAL INSPECTION

RESULT

1.1 EXTERNAL INSPECTION: cover , closures, straps, stitching, fastenings, adjustments, buckles.	
1.2 INTERNAL INSPECTION: retro-reflective tape, lifting becket, whistle, oral tube, light	

STEP 2. INSPECTION OF LUNG AND ORAL VALVE

RESULT

2.1 VISUAL INSPECTION OF LUNG	
2.2 RESULT OF LUNG LEAKAGE TEST	
2.3 OPERATION OF ORAL INFLATION TUBE / VALVE	

STEP 3. EXAMINE OPERATION OF MANUAL INFLATOR

RESULT

3.1 OPERATION OF MANUAL INFLATOR VALVE (applicable for all inflator heads)	
3.2 FIT NEW FIRING INDICATOR CLIP	

STEP 4. INSPECTION AND REARMING OF AUTOMATIC VALVE (automatic inflation models only)

Expiry Date

RESULT

4.1 UML INFLATORS RECORD EXPIRY DATE AND CONFIRM MECHANISM IS ARMED.	MM	/	YY	
4.2 HR INFLATOR RECORD EXPIRY DATE AND CONFIRM AUTO MECHANISM IS ARMED	MM	/	YY	

STEP 5. INSPECTION OF CO2 CYLINDER

RESULT

5.1 CONFIRM CORRECT SIZE / TYPE OF CO2 CYLINDER FITTED TO PFD				
5.2 CO2 CYLINDER IS UNPIERCED AND FREE FROM DAMAGE , RUST OR CORROSION				
5.3 WEIGH AND RECORD WEIGHT OF CO2 CYLINDER	MIN.GR.WT		ACTUAL WEIGHT	

STEP 6. REFIT CO2 CYLINDER

RESULT

6.1 CONFIRM INSPECTION STEPS 3 - 5 COMPLETED	
6.2 NEW OR INSPECTED (refer step 5) CO2 CYLINDER FITTED TO INFLATOR HEAD	

RESULT

STEP 7. SIGN AND DATE SERVICE INSPECTION SCHEDULE ON PFD	
STEP 8. REPACK PFD ACCORDING TO PFD OWNERS MANUAL	

STEP 9. I hereby certify that the PFD (identified top of page) has been inspected and serviced in accordance with Hutchwilco Inflatable PFDs Instructions for Service and Annual Self Inspection and that the PFD and components have PASSED all applicable service inspection steps 1- 8.

MM / YY
NEXT INSPECTION DUE

NAME:

SIGNATURE:

DATE:

ADDRESS:

PLEASE RETAIN COMPLETED DOCUMENT UNTIL NEXT SRVICE INSPECTION