



Daily Test – Visual Inspection: BA Set

<ul style="list-style-type: none">• Check ID numbers match on logbook, tally and BA set	
<ul style="list-style-type: none">• Check ID number on LDV matches number on front of logbook	
<ul style="list-style-type: none">• To check the integrity of the BA set's external battery – ensure it is correctly fitted, and remove the charging cable for the duration of the test.	
<ul style="list-style-type: none">• Check that all hose clips are present and secure	
<ul style="list-style-type: none">• Check all webbing and stitching for signs of wear/damage/degradation	
<ul style="list-style-type: none">• Ensure straps are in the right orientation and are not twisted	
<ul style="list-style-type: none">• Fully tighten all straps, check security of adjusting devices, and then extend all straps fully again	
<ul style="list-style-type: none">• Check all securing clips/buckles for signs of wear or damage	
<ul style="list-style-type: none">• Connect and then disconnect all buckles to ensure they operate correctly	
<ul style="list-style-type: none">• Adjust back-plate to correct height for user	
<ul style="list-style-type: none">• Inspect all hoses and ensure they are all securely fitted to BA set	
<ul style="list-style-type: none">• Inspect LDV hose for signs of damage	
<ul style="list-style-type: none">• Ensure male and female quick-release couplings for supplemental air are fitted, that they are free from debris, and that their protective caps are present and secure	
<ul style="list-style-type: none">• Ensure rubber buffer is fitted to base of set	





<ul style="list-style-type: none">• Check for presence and condition of anti-tamper cap on first stage reducer	
<ul style="list-style-type: none">• Where fitted: ensure anti-vibration clip is secured correctly	
<ul style="list-style-type: none">• Extend personal line fully – checking correct function, (the line should stop at the 1.25m knot and continue to extend when the button is pressed) and examine the line for signs of wear/ damage.	
<ul style="list-style-type: none">• Examine the carabiner for signs of damage and correct operation	
<ul style="list-style-type: none">• Ensure the line housing unit is secured to the waist belt of the set	
<ul style="list-style-type: none">• Check condition of the Bodyguard unit, screen and protective cover	
<ul style="list-style-type: none">• If using a PSS7000: check for debris in the mechanical low-pressure warning whistle (LPWW) located above the first stage pressure reducer	
<ul style="list-style-type: none">• Where fitted to the set: check the operation of any accessories such as torch radio communications equipment and cable cutters	
<ul style="list-style-type: none">• Ensure all aspects of the set are clean and operationally-ready. Clean set and cylinder cover if required	





Daily Test - Visual Inspection: Facemask

<ul style="list-style-type: none">• Ensure facemask, inner mask, and head harness are the same size as those you are currently Portacounted for	
<ul style="list-style-type: none">• Check condition of visor for damage or severe scratching/impairment	
<ul style="list-style-type: none">• Check exhalation valve cover intact	
<ul style="list-style-type: none">• Check inner mask including exhalation valve (for debris), nose-cup valve disks, and rubber face-seal	
<ul style="list-style-type: none">• Check condition and operation of head harness, buckles, neck loop and retaining stud. Fully tighten and then loosen all straps	
<ul style="list-style-type: none">• Disconnect LDV from facemask	
<ul style="list-style-type: none">• Check LDV is free from debris, and for the presence rubber shroud and O-ring	
<ul style="list-style-type: none">• Reconnect LDV. Ensure it connects to facemask with positive, audible 'click' then pull LDV away from facemask to make sure it is housed correctly	

Daily Test – Visual Inspection: Cylinder

<ul style="list-style-type: none">• Check cylinder connection is hand-tight	
<ul style="list-style-type: none">• Check condition of cylinder cover. Ensure cylinder contents label displays FULL. Clean cylinder cover if required	
<ul style="list-style-type: none">• Where fitted – ensure anti-entanglement straps are correctly secured. Check straps for signs of wear/degradation	





High-Pressure Leak Test Procedure: Dräger Body Guard 7000 Key Components





High-Pressure Leak Test Procedure: LDV Key Components

Reset Button (red or green)

LDV Outlet Port

Rubber Shroud

O-Ring (orange)

Positive Pressure By-Pass
Button



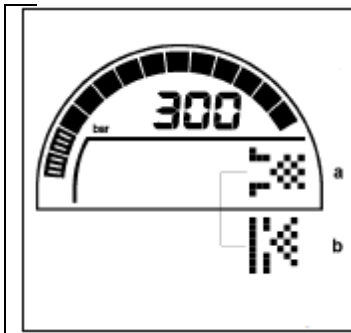


High-Pressure Leak Test Procedure

<ul style="list-style-type: none"> Ensure Reset Button on LDV has been pressed (either green or red) 	
<ul style="list-style-type: none"> Fully open cylinder: activating the Bodyguard, and follow instructions on the LCD display screen 	

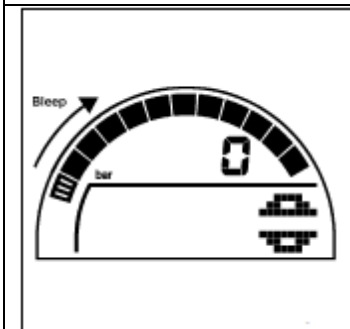
DDU Display	User Action Required
	<p>Action required – Yes</p> <ul style="list-style-type: none"> Depress left hand button to select the high pressure leak test.
	<p>Action required – Yes</p> <ul style="list-style-type: none"> Fully close the BA cylinder. Ensure cylinder contents $\geq 280\text{bar}$ (or $\geq 290\text{bar}$ for a Monthly Test) Depress right hand button to confirm cylinder now fully closed, ensuring this is completed before the black squares at the top of the DDU disappear (otherwise the Bodyguard will record a fail)
	<p>Action required – No</p> <ul style="list-style-type: none"> After a few seconds of stabilisation, the Bodyguard will undertake the HP Leak Test automatically.





Action required – Yes

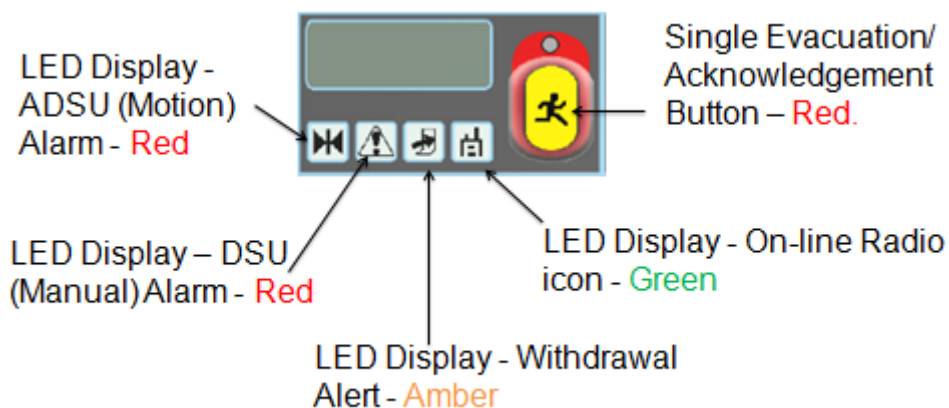
- **If the test passes:** The Bodyguard will ask you to exhaust the air from the system (*Fig. a*):
 - Cover LDV Outlet Port with palm of hand.
 - Press the Positive Pressure Bypass Button
 - Slowly vent the system by carefully lifting the palm of the hand from the LDV Outlet Port to maintain a slow decrease in pressure
 - Observe DDU while slowly venting pressure to ensure that Low Pressure Warning Whistle on the BA set operates when the pressure reaches 55 bar (+/- 5 bar).
- **If the test fails:** The Bodyguard will emit 10 beeps in rapid succession, and display either a cross, or 'Leak Test Failed' icon (see *Fig. b*). Repeat test once more – defecting the set if the test fails a second time.



Action required – Yes

- Ensuring you have pressed the reset button on the LDV; fully open the BA cylinder

Bodyguard ADSU, DSU and Telemetry Checks



WARNING – ALARM VOLUMES >100dB: USE HEARING PROTECTION WHERE REQUIRED





<ul style="list-style-type: none">• Ensure Merlin Board provided has been disconnected from charging supply	
<ul style="list-style-type: none">• Remove tally from Bodyguard and place into vacant slot in the Merlin Board	
<ul style="list-style-type: none">• Ensure that the On-line Radio icon displays solid green	
<ul style="list-style-type: none">• Allow Bodyguard to go into pre-alarm (after 21-25 seconds)	
<ul style="list-style-type: none">• Shake Bodyguard to cancel pre-alarm	
<ul style="list-style-type: none">• Allow Bodyguard to go into pre-alarm, and then full-alarm (a further 8 seconds after pre-alarm,) two blue and red LED's will flash intermittently on the Bodyguard	
<ul style="list-style-type: none">• Ensure ADSU LED Display flashes red on Merlin Board, and that the Board alarms	
<ul style="list-style-type: none">• Confirm receipt of signal on board by pressing Single Evacuation/ Acknowledgement button	
<ul style="list-style-type: none">• Remove tally from Merlin Board, insert into Bodyguard to cancel alarm, and then remove again	
<ul style="list-style-type: none">• Place tally into same slot you have previously used	
<ul style="list-style-type: none">• Depress the yellow DSU button on the Bodyguard, ensuring it alarms, and the corresponding DSU LED Display flashes red on the Merlin Board.	
<ul style="list-style-type: none">• Ensure Merlin Board alarms also, and acknowledge receipt of signal by pressing the Single Evacuation/Acknowledgment button on the board.	
<ul style="list-style-type: none">• Remove tally from Merlin Board, insert into Bodyguard to cancel alarm, and then remove again	
<ul style="list-style-type: none">• Place tally into same slot you have previously used	
<ul style="list-style-type: none">• Press and hold right-hand button on Bodyguard – both the Bodyguard and Merlin Board should emit a succession of 3 beeps in a row, followed by a pause. The Withdrawal Alert LED Display should also flash amber	
<ul style="list-style-type: none">• The LCD screen should display a “running person” icon, and the LED above the Single Evacuation/Acknowledgement Button should flash red	





<ul style="list-style-type: none"> • Press the Single Evacuation/Acknowledgment button to acknowledge receipt of the signal. A confirmation beep should emit from the Bodyguard 	
<ul style="list-style-type: none"> • Press and hold the Single Evacuation/Acknowledgement Button of the corresponding slot your tally was in. Both the Board and Bodyguard should alarm (see bullet point above) 	
<ul style="list-style-type: none"> • Depress the right-hand button on the Bodyguard to confirm receipt of the evacuation signal from the Merlin Board. This should cause the Merlin Board to emit a single long beep in response 	
<ul style="list-style-type: none"> • Re-insert tally into Bodyguard 	

Face-Fit Test:

<ul style="list-style-type: none"> • Don facemask and breathe normally. Inhale and exhale deeply at least twice 	
<ul style="list-style-type: none"> • Test operation of supplementary flow/positive pressure device by briefly pressing black supplementary flow/ positive pressure device in centre of LDV 	
<ul style="list-style-type: none"> • If seal is poor – readjust harness or try a different-sized mask 	
<ul style="list-style-type: none"> • Hold breath for a few seconds to ensure no airflow from the facemask is audible 	
<ul style="list-style-type: none"> • Check cylinder contents are at least 280 Bar 	
<ul style="list-style-type: none"> • Prior to fully closing the cylinder, hold breath 	
<ul style="list-style-type: none"> • Fully close cylinder valve 	
<ul style="list-style-type: none"> • Whilst holding breath: move head up and down and side-to-side for 8 seconds: ensure no airflow from the facemask is audible 	
<ul style="list-style-type: none"> • Breathe out to release vacuum, then suck onto face 	
<ul style="list-style-type: none"> • Fully slacken off head harness straps whilst removing facemask 	





<ul style="list-style-type: none"> • Check that the gauge on the Bodyguard reads '0' before switching off: by pressing and holding the left-hand button 	
<ul style="list-style-type: none"> • Complete BA Logbook, and enter surname and cylinder pressure (rounded down) onto tally; ensure sufficient space is left for BAECO to write "time-in" 	
<ul style="list-style-type: none"> • Clean BA facemask in accordance with Equipment Data Sheet and return it to its designated facemask bag 	
<ul style="list-style-type: none"> • Ensure BA set and Merlin Board are stowed correctly, and put back on charge 	

Instructor Name	Date	Pass/ Fail	Signature
Comments:			

Student Name	Date	Trust	Signature