

Kirby Morgan® Deep Sea Diving Helmets SuperLite® 17B

A2.1.1 Water Test Procedure

Water testing is the preferred method to ensure the helmet is leak-free and should be performed after an A2.1 overhaul or at any time the helmet is being removed from long-term storage or is in question. A complete and correct water test must be done, first testing the helmet with one inlet source (main supply) and then the other (EGS) separately while one inlet is open to the surrounding water. Using the main supply connection without the EGS hose connected will show any leaks from the EGS valve body/stem or seat/stainless side block.

Date: _____

SL 17B Helmet Serial Number: _____

Associated Equipment Serial #(s): _____

Technician (*print name*): _____

1. Required Items SuperLite® 17B

Items
1. Suitable neck dam plug. The helmet neck seal is blanked off by plugging the neck dam. Any container with a 5-5 ½" or 127-140 mm diameter should work for a medium/large neck dam. A container with an approximate 8" or 200mm length is recommended.
2. Low-pressure air source (135-150 PSI) to connect to the applicable One-Way Valve fitting or one for the EGS connection.
3. Suitable container to completely submerge the Helmet with LP air attached.


1.1 SuperLite® 17B Plugged Neck Dam Test

Items
1. Insert the plug into the neck dam.
2. Using masking tape, tape the neck dam to the plug to prevent leaking or movement. Cable ties may be lightly secured over the tape just below the top of the neck dam.

2. Helmet Water Test Main Supply

PERFORM THE FOLLOWING:

Procedures	Initials
1. Close the Defogger/Steady Flow & EGS valve and turn the regulator adjustment knob in (clockwise).	
2. Ensure the EGS whip is removed and the EGS inlet is not capped or blocked shut.	
3. Connect the regulated air source to the one-way valve and pressurize.	
4. Cycle the Defogger/Steady Flow valve and EGS valve (if the main supply inlet is used close EGS valve, if the EGS inlet is used to supply gas to the helmet, leave it open), and activate or pulse the regulator purge .	
5. Submerge the helmet.	
6. Release gas into the helmet by opening the Defogger/Steady flow or regulator purge. Residual bubbles can be wiped away with a hand before observations.	
7. Keep the helmet submerged for approximately 3 minutes. Once the trapped air has escaped, look for bubbles and water entering the helmet. Bubbles can be wiped away with a hand before observations.	

Procedures	Initials
8. Move the nose block device in and out.	
9. Lightly pulse the regulator purge 5x and allow it to settle.	
10. Crack the Defogger/Steady Flow Valve for 5 seconds and close  Some air leaks may only show when the helmet goes positive. NOTE	
11. Dial out the regulator adjustment knob counterclockwise until a slight free flow starts, then dial back in clockwise until it stops, then one more full turn. Dial in further to desensitize as needed.	
12. Tilt the helmet around while looking for leaks.	
13. Remove the helmet from the water.	
14. Open and close the EGS Valve to purge excess water from the EGS inlet.	
15. Secure air, bleed down and disconnect.	

Recorded in service records for helmet and EGS System (maintenance log books)? Yes No

Recorded service in helmet maintenance log book? Yes No



I _____ hereby certify that I have performed the work required in the A2.1 and that **I AM** a certified KMDSI / Dive Lab technician.

Print Name: _____

Signature: _____ Date: _____

ID #: _____ Date of Certification: _____



I _____ hereby declare that I have performed the work required in the A2.1 and **I AM NOT** a certified KMDSI/Dive Lab technician.

Technician/Owner Print Name: _____

Signature: _____ Date: _____

Comments: _____

KMDSI strongly recommends that a certified KMDSI Repair Technician make all repairs and that only genuine KMDSI repair and replacement parts be used. Owners of KMDSI products that elect to do their own repairs and inspections should only do so if they possess the knowledge and experience. All inspections, maintenance, and repairs should be completed using the appropriate KMDSI user guide and Operations and Maintenance Manual(s). Persons performing repairs should retain all replacement component receipts for additional proof of maintenance history. Should any questions on procedures, components, or repairs arise, please contact Kirby Morgan Dive Systems, Inc., by telephone at (805) 928-7772 or via e-mail at kmdsi@kirbymorgan.com, or contact Dive Lab, Inc., by telephone at (850) 235-2715 or via e-mail at divelab@divelab.com.



NOTE The Maintenance Log, Appendix 3, found in the Misc. Appendices checklists on the Kirby Morgan website, may be used as a template to create blank pages to record all the maintenance performed.