Kirby Morgan®
Deep Sea Diving Helmets

KM Diamond

A2.4
Supervisors Equipment Checks Prior to Entry Into Water

NOTE: This checklist is intended to be used with the KMDSI KM Diamond. The diving supervisor or person appointed by the diving supervisor should use this checklist as a minimum prior to deploying divers.

NOTE: Helmet(s) being used in polluted waters, or extreme environments, will require inspection that is more frequent. Supervisor must ensure all pre-dive set up and maintenance has been accomplished.

⚠ CAUTION

The use of a Tender to assist the diver when "dressing-in" is mandatory. The Tender should ensure the Helmet Liner is fastened to the Helmet Shell and the Chin Strap is properly fastened under the diver's chin, once the Helmet is donned.

⚠ WARNING

Below are the recommended minimum checks when using Kirby Morgan Helmets or Masks. Additional checks may be required as dictated by the conditions and tasks being performed. Failure to perform in-water checks may result in serious injury or death.

⚠ CAUTION

All surface supplied diving with Kirby Morgan Helmets must include a fully functional, properly maintained Emergency Gas System ("EGS"). The EGS should be maintained in accordance with the applicable Modular Operations and Maintenance Manual(s).

Date: _____

Helmet Serial Number _____ Diamond Main Tube # _____

Diamond Pod Serial # _____ Diamond Exhaust Serial # _____

Associated Equipment Serial #(s): _____

Technician *(print name)*: _____

1. Supply Gas

SUPERVISOR – CHECK THE FOLLOWING:

Procedures	Initials
1) **SUPERVISOR:** Ensure main gas supply to the diver is on.	
2) Ensure EGS cylinder is completely open and log pressure _____ psig.	
3) Confirm Adjustable Neck Pad is set to correct position for the diver.	

2. Check Breathing System

DIVER – CHECK THE FOLLOWING:

Procedures	Initials
1) Open and close the Steady-Flow Valve to ensure proper operation.	
2) Check breathing resistance. Set Demand Regulator Adjustment Knob for minimum inhalation effort.	
3) Press Purge Button to check gas purge function.	
4) Ensure Nose Block Device slides freely.	
5) Ensure Emergency Valve opens and closes properly. Then, ensure Emergency Valve is closed and the Bail Out Cylinder Valve is open.	
6) Confirm smooth operation of Surface Bypass Valve (SBV) by turning SBV control handle from Surface Vent to Open Circuit mode and back to Surface Vent.	

Procedures	Initials
7) Confirm smooth operation of OPRV by rotating open circuit control knob from closed to open and back to closed.	
8) Confirm exhaust hose is properly secured to SBV.	

3. Check Communications

DIVER – CHECK THE FOLLOWING:

Procedures	Initials
1) Perform communications check.	

4. Check Water Supply *(If Applicable)*

TENDER – CHECK THE FOLLOWING:

Procedures	Initials
1) Check water supply connections. Ensure topside water supply has been switched to diver and verify flow to water shroud and suit (if used).	

5. Check the Dry Suit Inflation Hose *(If Applicable)*

TENDER – CHECK THE FOLLOWING:

Procedures	Initials
1) Check dry suit Inflation Hose Connection. Ensure dry suit Inflation Valve and Exhaust Valve function properly.	

6. Check Entire Rig

TENDER – CHECK THE FOLLOWING:

Procedures	Initials
1) Soap and leak check Helmet/Mask gas fittings and connections, including Emergency Gas System.	

7. Check Diver's Entire Rig

⚠ WARNING

Both Pull Pins must engage correctly or the Neck Dam Ring Assembly could flood, drowning may result.

ATTEMPT TO ROTATE PULL PINS, IF PIN ROTATES THIS IS AN INDICATION THAT PIN IS NOT CORRECTLY ENGAGED..

SUPERVISOR/TENDER – CHECK THE FOLLOWING:

Procedures	Initials
1) Ensure the sealed Pull Pins are fully engaged on the base of the Helmet Ring into the Locking Collar/Neck Pad Assembly	
2) Diver's Safety Harness.	
3) Umbilical strain release.	
4) EGS Hose Quick Disconnect is in locked position.	
5) Boots, gloves, knife, and other accessories.	
6) Recommended minimum Supply Pressures at the start of the dive. For Surface Supplied Diving minimum 100 psig (7 bar) , adjust as necessary based on depth of the dive . For Bell/Saturation Diving helmet supply minimum pressure of 150 psig (10 bar), adjust as necessary based on depth of the dive.	

8. Check Breathing

DIVER – CHECK THE FOLLOWING:

Procedures	Initials
1) Check to ensure helmet is breathing properly.	
2) Slightly open the Free Flow valve to ensure a light, but steady flow of gas is entering the helmet until the diver reaches the bottom.	

NOTE: All equipment must be adjusted properly and functioning correctly. The Helmet/Mask must be breathing easily and properly.

Supervisor's Name (Print): _____

Supervisor's 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.