# Kirby Morgan<sup>®</sup> Manifold Block

## Annual Overhaul, Maintenance, and Inspection Checklist

### A2.1

THIS INSPECTION AND MAINTENANCE SHOULD BE PERFORMED <u>AT LEAST ANNUALLY</u> AND AS DIC-TATED BY CONDITION REVEALED DURING DAILY/MONTHLY INSPECTION. MONTHLY INSPECTIONS DE-TERMINE NECESSITY FOR OVERHAUL WITH MORE ACCURACY THAN SIMPLY PLACING A NUMBER OF HOURS OF USE.

This checklist is intended to aid persons performing routine overhauls on the Manifold Block. The checklist should be used in conjunction with the latest version of the applicable Operations and Maintenance module. This checklist is to guide and document the maintenance as it is completed. Specific detailed procedures for each section of this checklist can be found in the latest version Operations and Maintenance Modules. This checklist when completed should be retained in the equipment maintenance files.

**NOTE:** Manifold blocks used in polluted waters, or extreme environments will require more frequent inspection.

**NOTE:** Maintenance procedures for the manifold block are under the support tab/ manuals & Exploded views under Full Face Masks.

- **NOTE:** KMDSI strongly recommends that all repairs be performed by trained personnel
- **NOTE:** When performing a scheduled overhaul, it is strongly recommended that all O-rings be replaced. When using the A2.1 as an "inspection" only, in-between annual overhauls, O-rings may be reused if inspection reveals the O-rings are serviceable
- **NOTE:** This checklist should be used in conjunction with the most current user guide and Operations and Maintenance Module. For latest module revisions please check the KMDSI website <u>www.kirbymorgan.com</u>

#### **A** WARNING

These are recommended minimum checks when using the Kirby Morgan Diver's Manifold Block. 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.

### **A** WARNING

KMDSI strongly recommends that all repairs and maintenance be performed by trained personnel. Owners of equipment that are not trained and certified to perform maintenance and repairs do so against the recommendations of KMDSI and Dive Lab and at their own risk. Persons fraudulently acting as certified/authorized KMDSI technicians are a potential hazard to anyone using equipment serviced by them. This is due to a higher probability of equipment malfunction that could lead to serious injury or death.

#### **A** WARNING

All diving conducted using the Kirby Morgan Diver's Manifold Block must include the use of a fully functional, properly maintained Emergency Gas System ("EGS"). The EGS should be maintained in accordance with the Modular Operations and Maintenance Manual(s). If an EGS is not present or is not functioning correctly, and an "out of air" situation occurs, this could result in serious injury or death.

#### Date:

Associated Equipment Serial # (s), if applicable:

Equipment belonging to:

Technician (print name):

Remarks:

# **Procedures**

#### **DIVER/TENDER - CHECK THE FOLLOWING:**

	Initials	
Procedures	Owner	Certified Technician
<ol> <li>Remove, disassemble, and overhaul the Emergency Valve components, replace all O-rings. Guidance KMDSI modular manual.</li> <li>NOTE: Visually inspect parts for corrosion. Look for discoloration, pitting and micro cracks. These conditions could result in a part failure. Corrosion pitting may have deep cavities that are not vis- ible. If there's any doubt about the integrity of the part it should be replaced.</li> </ol>		
2) Remove, discard, and replace umbilical adapter with a new one.		
3) Remove, disassemble and overhaul the one-way valve. Guidance one-way valve module from the KMDSI modular manual.		
4) Remove, disassemble, and overhaul the Emergency Valve. Guidance KMDSI modular manual.		

**NOTE:** It is not required to remove the EGS Valve from the Manifold Block for the annual overhaul. However, if the EGS Valve exhibits **excessive corrosion/verdigris**, the EGS Valve will require removal, cleaning, and resealing with Teflon<sup>®</sup> tape.

Has service been recorded in maintenance log book? □ YES □ NO

**NOTE:** KMDSI strongly recommends that only trained certified KMDSI technicians perform overhauls. The below statement is intended to discourage non-trained and non-certified persons from posing as certified KMDSI technicians.

I		hereby verify that I have	eperformed the
work required in the A2.1 a	and that <u>I am</u> a certified k	hereby verify that I have (MDSI / Dive Lab technician.	
Print Name	Signature		
Date	ID#	Date of Certification	
I work required in the A2.1 a	and <u>I am not</u> a certified K	hereby verify that I have MDSI / Dive Lab technician.	performed the
Technician / Owner: Print	name		

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 <u>kmdsi@kirbymorgan.com</u>, or contact Dive Lab, Inc., by telephone at (850) 235-2715 or via e-mail at <u>divelab@divelab.com</u>.

**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.