

Kirby Morgan® Manifold Block

Monthly Inspection and Maintenance Checklist

A2.2

This inspection is the minimum recommended maintenance and should be performed at least ONCE A MONTH with manifold blocks in continuous use (used for more than 20 diving days in a month) or at least every TWO (2) MONTHS, with manifold blocks used less than 10 diving days a month.

This checklist is intended to aid persons performing routine maintenance and inspections on the manifold blocks. This checklist should be used in conjunction with the applicable user guides, Operations and Maintenance modules and is primarily intended to guide and document the maintenance as it is completed. Specific detailed procedures for each section of this checklist can be found in the user guide and Operations and Maintenance modules. This checklist when completed should be retained in the equipment maintenance files.

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

WARNING

These are recommended minimum checks when using the Kirby Morgan 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.

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:

Step	Procedures	Initials	
		Owner	Certified Technician
1) Assembly Inspection	1) Visually inspect the Assembly for signs of damage.		
	2) Test-mate the threads		
	3) Remove the EGS knob and inspect the exterior surfaces of the shaft and packing nut for obvious signs of corrosion and damage. Replace and repair as necessary. Guidance KMDSI modular manual. 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 visible. If there's any doubt about the integrity of the part it should be replaced.		
	4) Confirm the smooth operation of the control knob.		
	5) Check to ensure all the port plugs are installed and are tight.		

Step	Procedures	Initials	
		Owner	Certified Technician
2) EGS Inspection	1) Inspect all EGS Hoses for signs of damage.		
	2) Inspect the cylinder and valve for signs of damage.		
	3) TEST the First Stage Regulator I.P. and Over-Pressure Bleed/Relief Valve settings.		
	4) Inspect the Safety Harness and Cylinder Retainer for wear or damage. Repair/replace as necessary.		

Step	Procedures	Initials	
		Owner	Certified Technician
3) Assembly Check	1) Using an 1¼" open-end wrench, check to ensure the packing nut on the emergency valve is snug. Note: do not over tighten. The valve handle should turn freely. Check to ensure the packing nut does not turn when a light force is applied with the wrench.		
	2) Orally check the one-way valve by blowing through it. Air should pass freely out of the open hose(s). Next suck back on the umbilical adapter, no air should pass back through the one-way valve. If air can be drawn back through the one-way valve, the one way valve will require overhaul or replacement. DO NOT DIVE if test fails.		
	3) Connect the EGS supply hose to the block's EGS Valve and connect the open hose(s) to the mask.		

Step	Procedures	Initials	
		Owner	Certified Technician
3) Assembly Check	4) Open EGS supply valve on the cylinder. Log the pressure _____ psig. Next open the EGS valve on the Manifold Block.		
	5) Place the pressurized manifold block in a bucket of water and check the one-way valve for leaks. No air should leak through the one-way valve or from anywhere else on the manifold block assembly. If there is a leak, the one-way valve MUST be rebuilt or replaced.		
	6) Turn EGS supply cylinder is turned off.		
	7) Depressurize manifold block.		

Step	Procedures	Initials	
		Owner	Certified Technician
4) Tender	1) Note comments or discrepancies below in the comments section. Log maintenance in the applicable maintenance log.		

Has service been recorded in maintenance log book? YES NO

Technician 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.