

Kirby Morgan® Surface Supplied MOD-1

A2.3

Surface Supplied Pod and Emergency Gas System Daily Set-Up and Functional Checklist

THIS DAILY SET-UP AND FUNCTIONAL CHECKLIST SHOULD BE COMPLETED PRIOR TO COMMENCEMENT OF DAILY DIVING OPERATIONS AND AT LEAST EVERY 24 HOURS IF IN CONTINUOUS USE.

⚠ WARNING

These are recommended minimum checks when using the M-48 MOD-1 with Surface Supplied Pod. 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



Mask(s) being used in extreme environments will require more frequent inspection.



During removal of components for inspection, O-rings and other consumable items may be re-used, providing they are clean and a visual inspection does not reveal any damage or deterioration.



Perform the Side Block/Balanced Regulator inspection procedures with gas supplies not connected to the Side Block. Attach the gas supply at Step 5 of the "Side Block/Balanced Regulator" inspection procedure.



Steps 2(A)–2(D) use the EGS for setting up and checking the Mask's systems. For a proper check of the Demand Regulator adjustment, the First Stage Regulator must have an intermediate supply pressure output between 120–145 psig (8–10 bar). The First Stage Bleed/Relief Valve should be set between 180–200 psig (12.4–13.8 bar). Do not attach the Umbilical until Step 5.

Date: _____

Mask Serial Number _____

Pod Serial Number _____

Associated Equipment Serial #(s): _____

Technician (*print name*): _____

1. Hood and Mount Frame Assembly

DIVER/TENDER - CHECK THE FOLLOWING:

Procedures	Initials
1) Visually inspect the Hood, Face Seal and ear pockets for signs of damage. Check the Hood for tears, holes, and/or cuts. Ensure zipper operates properly. Ensure the leading edge of the hood's outer seal is clear of the mask skirt. The mask skirt should touch the diver's face first and the hood outer seal will surround the face where the mask skirt stops.	
2) Check the screws, locknuts, frame brackets and hood frame for condition and security.	
3) Carefully inspect mask strap for signs of cracking or tearing. Mask adjustment buckles should be checked for damage and tested for proper function. Ensure each strap has a keeper.	

2. Visually Inspect Mask

DIVER/TENDER - CHECK THE FOLLOWING:

Procedures	Initials
1) Visually inspect the interior/exterior of the Mask for any obvious signs of damage. Ensure the Nose Pinch Assembly is installed correctly and secured. Visually inspect viewing lenses. They should be clean and clear. A good practice is to APPLY ANTI-FOG SOLUTION prior to use.	
2) Ensure the Microphone with boot is installed correctly.	

Procedures	Initials
3) Check all moving parts to ensure smooth and proper operation. A) Steady Flow Control Knob B) EGS Valve C) Regulator Adjustment Knob D) Ensure the One Way Valve is operational	
⚠ WARNING The One Way Valve must be tested daily prior to commencing diving operations. DO NOT DIVE THE MASK if the One Way Valve is not operating properly. If the Hose parts near the surface, serious injury could result to the divers' lungs and/or eyes. In extreme cases, this could be fatal.	
4) Orally check the One-Way Valve. With the steady flow valve open, orally blow air thru the one-way valve. Air should pass freely. Next suck back on the umbilical adapter, no air should pass back thru the one way valve and umbilical adapter. If air can be drawn back thru the one way valve, the one way valve will require overhaul or replacement. DO NOT DIVE IF TEST FAILS.	
5) Connect the first stage regulator to the EGS Cylinder and the Mask Emergency Supply Valve. With the cylinder turned OFF, open and close the Side Block (EGS) to check for smooth operation. Then open and close the Steady Flow Valve to check for smooth operation.	

3. EGS Inspection



NOTE

The EGS being used must be properly maintained and fully functional.

DIVER/TENDER - CHECK THE FOLLOWING:

Procedures	Initials
1) Visually inspect all EGS hoses for signs of damage.	

Procedures	Initials
2) Check to ensure the cylinder is within the VIP and the hydro dates.	
3) Ensure the First Stage Regulator pressure setting and the Over Pressure Bleed/Relief Valve settings have been checked within the past month. (Maintenance Log).	
4) Inspect the Safety Harness and Cylinder Retainer for wear and damage. Repair/replace as necessary	
5) Document inspection/maintenance in Maintenance Log (Appendix 3)	

4. Check the Mask

DIVER/TENDER - CHECK THE FOLLOWING:

Procedures	Initials
1) Rotate the Regulator Adjustment Knob OUT fully (counterclockwise), then rotate in (clockwise) 1-2 rotations to check for smooth operation.  NOTE Put one hand inside of mask to be used to create back pressure and stop demand regulator free flow.	
2) Open the EGS supply valve on the cylinder. Log the pressure _____ psig. Then open the emergency supply valve on the Side Block.	
3) Momentarily open the Steady Flow Valve. Check for a strong flow of gas out of the system, and then close.	
4) Check for gas escaping from the One-Way Valve. If any gas flow is detected the One-Way valve should be overhauled or replaced. DO NOT DIVE IF TEST FAILS.	
5) Turn off EGS supply cylinder.	

5. Attach the Umbilical

TENDER - CHECK THE FOLLOWING:

Procedures	Initials
1) Blow down the umbilical and attach it to the Umbilical Adapter on the One Way Valve.	

6. Check the Demand Regulator Adjustment



NOTE

If the Purge Button has a weak flow of gas when fully depressed, the adjustment of the Regulator is necessary. Guidance Modular O&M Manual.

DIVER/TENDER - CHECK THE FOLLOWING:

Procedures	Initials
1) Rotate out (counterclockwise) on the Adjustment Knob until a slight free flow develops. Then rotate in (clockwise) until the free flow stops.	
 Put one hand inside of mask to be used to create back pressure and stop demand regulator free flow. 2) Depress the Purge Button all the way, verify a strong surge of gas.	
3) Ensure the Side Block Emergency Valve is closed , and the Bail Out Cylinder Valve is open . Log the cylinder pressure _____ psig.	

7. Check the Communications

DIVER - CHECK THE FOLLOWING:

Procedures	Initials
1) Perform communications check.	

8. Check the Entire Rig

TENDER - CHECK THE FOLLOWING:

Procedures	Initials
1) Soap and leak check the Mask gas fittings and connections including the EGS.	

9. Check the Diver's Entire Rig

SUPERVISOR/TENDER - CHECK ADJUSTMENT/FIT OF THE ENTIRE RIG, INCLUDING THE FOLLOWING

Procedures	Initials
1) Diver's Safety Harness	
2) Umbilical Strain Release	
3) EGS Hose Quick Disconnect	
 NOTE All equipment must be adjusted properly and functioning correctly.	

10. Check Breathing

DIVER - CHECK THE FOLLOWING:

Procedures	Initials
1) Check to ensure the Mask is breathing easily  NOTE The Mask must be breathing easily and properly.	

11. Diver(s) is/are Ready

DIVER - CHECK THE FOLLOWING:

Procedures	Initials
1) Report when you are ready to enter the water.	

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.