

## Chapter 5

# Inspection and Maintenance

### 5.1 Routine Maintenance

Routine and preventative maintenance is critical and must be done on a regular basis. All parts and components of the helmet have a useful service life and eventually will require replacement. Some items, when properly maintained, can go many years before replacement becomes necessary. Each helmet or mask should have a logbook that tracks the usage, maintenance and repairs.

It is essential to safety of the user that a routine and periodic schedule of maintenance, inspection, and testing be carried out. Helmets should be inspected pre-dive on a daily basis. Helmets in continuous use around the clock should be rotated out every 24 hours and have a daily pre-dive inspection performed. Post dive cleaning and inspections should be completed each time helmet or mask use is finished for the day. To minimize the spread of germs, sanitizing should be performed after use, and in between use by different divers. Sanitizing procedures and recommended solutions are described and explained in the General preventative section of each KMDSI helmet and mask manual. If the user is in doubt about the serviceability or has questions in general, please contact your local KMDSI authorized repair facility or KMDSI at Tel. 805-928-7772. Check the Dive Lab website at [www.divelab.com](http://www.divelab.com) for the most up-to-date maintenance procedures.

KMDSI Maintenance Checklist are located on the KMDSI and Dive Lab websites. The checklists are intended for all helmet and mask models. There are also checklists for the KMB-18/28 band masks which are done up the same as the helmet checklists.

- A2.1. All SL and KM helmets (all models) Recommended Annual Maintenance Inspection and Overhaul
- A2.2. Monthly Maintenance
- A2.3. Daily Set-Up and Functional Checklist
- A2.4. Supervisor's Equipment Checks Prior to Entry
- A2.5. Supervisor's Equipment Checks In-Water
- A2.6. Post Dive Cleaning

#### 5.1.1 Daily Pre-Dive Maintenance A2.3

The helmets and masks should be set up in accordance with the Daily Set-Up and Function Checklist A2.3. The checklist can be laminated placed on a clipboard and checked off with a grease pencil. Completion

should be logged in both the supervisors log and the helmet or mask log book. The daily pre-dive is minimum daily checks KMDSI recommends. The daily pre dive may be modified to suit the needs of the user providing the basic intent of the checklist is being completed in a manner with the original intent.

#### 5.1.2 Daily Post Dive Maintenance A2.6

The helmets and masks should be cleaned in accordance with the A2.4 checklist The checklist can be laminated placed on a clipboard and checked off with a grease pencil. Completion should be logged in both the supervisor's log, and the helmet or mask log book. The daily pre-dive is minimum daily checks KMDSI recommends. The daily post-dive may be modified to suit the needs of the user providing the basic intent of the checklist is being completed in a manner consistent with the original intent.

#### 5.1.3 Supervisors Equipment Checks A2.4 and A2.5

These checks should be conducted by the diving supervisor or by persons designated by the supervisor in accordance with company policy.

### 5.2 Monthly Maintenance

A monthly inspection should be performed IAW the A2.2 checklist on a monthly or as directed by the A2.2 and / or anytime serviceability of the helmet or mask is in doubt. Helmets or masks used in contaminated waters or for welding, burning, and jetting operations will require service and inspection more frequently. If a situation arises that casts any doubt as to the serviceability of a part or component it should be replaced.

Use the appropriate manual for the model helmet or mask being serviced.

### 5.3 Yearly Maintenance

#### 5.3.1 Overhaul/Inspection Checklist A2.1

The A2.1 checklist procedure fulfills all requirements for complete inspection. The checklist should be performed at least annually and or more often if daily and monthly inspections reveal signs of excessive corrosion, contamination, improper operation or signs of damage or if the helmet log shows the unit had previously been used in a questionable environment. The daily and monthly inspections will determine the necessity for overhaul with greater accuracy than

simply placing a number of hours on the overhaul schedule. All O-ring's, exhaust valves, and soft goods should be replaced at least once a year. In between overhauls the soft goods can be cleaned inspect and reused providing a careful inspection reveals no damage or deterioration. Again, logged questionable previous diving environments will be determining factor as well. The A2.1 checklist should be filled out and retained in the maintenance files and provides an excellent record of maintenance. All maintenance should be annotated in the helmet log.

The Overhaul Checklist Procedure A2.1 is intended to aid persons performing routine overhauls of KMDSI SuperLite® Helmets and Band Masks. The checklist should be used in conjunction with the applicable Operations and Maintenance Manual for the model helmet being serviced 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 Operations and Maintenance Manuals. This checklist when completed should be retained in the equipment maintenance files and the helmet or mask log book should be updated. The checklist's are intended to be used for all models of KMDSI SuperLite® and KM Helmets and band masks. All KMDSI helmet and band mask manuals can be downloaded free at [www.kirbymorgan.com](http://www.kirbymorgan.com).