

Kirby Morgan® 37 & 57 Helmets Operations and Maintenance Manual

KMDSI Part # 100-073

The KM37 helmet is covered by U.S. Patent #6,644, 307B2. Foreign and other patents pending.



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Manual prepared by KMDSI, Dive Lab, Inc. and Marine Marketing and Consulting.

NOTE: This manual is the most current for the Kirby Morgan 37 and 57 Helmet. It is page dated July 2010. Future changes will be shown on page III and the changed pages will carry the date of change. Previous manuals may not reflect these updates.

WARNING

Diving with compressed breathing gas is a hazardous activity. Even if you do everything right there is always the danger that you may be killed or injured. No piece of diving equipment can prevent the possibility that you may be killed or injured any time you enter the water.

The Kirby Morgan 37 helmet is CE Approved and meets or exceeds all performance and testing requirements of all government and non-government testing agencies throughout the world. It is approved for use on all commercial and military work underwater. Only Kirby Morgan masks and helmets have achieved the CR (Commercial Rated) mark, the highest United States of America rating.

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Warranty Information

Kirby Morgan Dive Systems, Inc. warrants every new mask, helmet, or KMAC Air Control System to be free from defects in workmanship for a period of three hundred sixty five (365) days from date of purchase. This warranty covers all metal, fiberglass, and plastic parts. This warranty does NOT cover rubber parts, communications components, or headliners. In addition, due to the electrolytic nature of underwater cutting and welding, chrome plating cannot be warranted when the diver engages in these activities.

Should any part become defective, contact the nearest authorized KMDSI dealer. If there is no dealer in your area, contact KMDSI directly at (805) 928-7772. You must have a return authorization from KMDSI prior to the return of any item, Upon approval from KMDSI, return the defective part, freight prepaid, to the KMDSI plant. The part will be repaired or replaced at no charge as deemed necessary by KMDSI.

This warranty becomes null and void if:

- 1) The product is not registered with KMDSI within ten (10) days of purchase.**
- 2) The product has not been properly serviced and/or maintained according to the appropriate KMDSI manual. In addition, the user is responsible to ensure that all product updates as recommended by KMDSI have been performed.**
- 3) Unauthorized modifications have been made to the product.**
- 4) The product has been abused or subjected to conditions which are unusual or exceed the product's intended service.**

NOTE: Be sure to complete the enclosed warranty card and return it to KMDSI immediately. No warranty claims will be honored without a satisfactorily completed warranty card on file at KMDSI.

Record Of Changes

It is the responsibility of the owner of this product to register their ownership with Kirby Morgan Dive Systems, Inc., by sending the warranty card provided. This card is to establish registration for any necessary warranty work and as a means of communication that allows KMDSI to contact the user regarding this product. The user must notify KMDSI of any change of address by the user or sale of the product.

All changes or revisions to this manual must be recorded in this document to ensure that the manual is up to date. Quantities marked in parenthesis.

Change Number	Date	Description of Change
1	05/16/2008	Reworded: 2.1 Product Specifications, 2.2.1 SuperFlow® and SuperFlow® 350 Demand Regulators, 2.2.2 SuperFlow® 450 Performance Certification and 2.5 Operational Specifications & limitations. Reworded Warnings: Page 23 (2) and page 32. Temperature limitations on page 24 changed from 36° F to 33° F. Changed regulator adjustment knob to Flex Knob on page 102. Location number in second NOTE on page 102 changed to reflect correct location Added: Appendix 3 and 4.
2	08/19/2008	Page III Removed page number column. Page 17: Updated CE approved graphic on SL-17A/B Page 18: Added CE approved graphic to KM-47 helmet. Updated CE approved graphic on SL-27. Page 20: Updated CE approved graphic on EXO-BR. Pages 57-58: Moved chapter 5 into two columns. Page 87: Added gasket warning on page 90 left column. Page 158-159: Changed torque specifications. Overset text arranged on next page (159).
3	11/05/2008	Added D-Ring to Image on pages 17, 28, and 29. Blowpart Image Updated with D-Ring on page 32, 38, 129, and 134. Text Updated on pages 57-58, 131. Rearranged pages 146-148, added diagram of earphone wire. Appendix A1: Torque Specifications updated on page 158.
4	02/25/2009	Text Updated on pages 144-145.
5	03/11/2009	Page 69, step 7; page 132 step 7; page 133 step 11; page 136 step 3; page 151 step 10: Changed kg cm to Newton Meters. Page 71: Lacquer thinner changed to acetone. Page 72: Corrected 35 inch pounds to 20 inch pounds in step 4. Lacquer thinner changed to acetone. Page 90: Corrected 75 inch pounds to 100 inch pounds in step 19. Page 102: Section 7.12.2 "SuperFlow® 450 Demand Regulator Test for Correct Adjustment, Fully Assembled," renumbered to aforementioned section number from incorrect 7.12.1. Page 117: Corrected 75 inch pounds to 100 inch pounds in step 8. Page 121: Corrected 35 inch pounds to 20 inch pounds in step 3. Page 123: Lacquer thinner changed to acetone. Page 124: Corrected 35 inch pounds to 20 inch pounds in step 4. Lacquer thinner changed to acetone. Page 158: Added Location # 104a 530-020 Screw, exhaust flange. Page 159: Added location # 176 550-533 Bent tube adapter, 450 Regulator.

6	07/27/2009	Added sections 2.1, 2.2, 2.2.1 and 2.2.2 for CE certification.
7	11/06/2009	Chapter 2: addition of CE conforming criteria. 2.3 Product Specifications corrected weight to 32.6 lbs from 30.6 lbs.
8	3/17/2010	Updated images and diagrams with new whiskers

 **WARNING**

Diving with compressed breathing gas is a hazardous activity. Even if you do everything right there is always the potential for serious injury or death. No one piece of diving equipment can prevent the possibility that you may be injured or killed any time you enter the water. We do not herein make any effort to teach the principles of diving. The information in this manual is intended for users of Kirby Morgan helmets and persons that maintain or service Kirby Morgan helmets.

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Definition of Signal Words Used in this Manual

For your protection, pay particular attention to items identified by signal words in this manual. These terms are identified as, CAUTION, WARNING AND DANGER. It is especially important for you to read and understand these sections.

DANGER

This word indicates an imminently hazardous situation, which if not avoided, could result in death or serious injury.

WARNING

This word indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

CAUTION

This word indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

If English is not your native language and you have any difficulty understanding the language of any warnings as they appear in the manual, please have them translated.

WARNING

Este é um aviso importante. Queira mandá-lo traduzir.

WARNING

Este es un aviso importante. Sirvase mandario traducir.

WARNING

Quest è un avviso importante. Tradurlo.

WARNING

Ceci est important. Veuillez traduire.

WARNING

Diese Mitteilung ist wichtig. Bitte übersetzen lassen.

If you have any questions concerning this manual or the operation of your helmet, contact KMDSI (805) 928-7772 or by Email at info@KMDSI.com or Dive Lab Inc. (850) 235-2715 or at Divelab@aol.com

IMPORTANT: A word about this manual. We have tried to make this manual as comprehensive and factual as possible. We reserve the right however, to make changes at any time, without notice, in prices, colors, materials, equipment, specifications, models and availability. Since some information may have been updated since the time of printing, please contact your local KMDSI dealer if you have any questions. Periodically KMDSI Operations and Maintenance Manuals are reviewed. Any updates/changes will be posted on the KMDSI website and may be downloaded for insertion/correction.

Important Safety Information:

This Kirby Morgan diving helmet is intended for use by trained divers who have successfully completed a recognized training course in surface supplied diving.

⚠ WARNING

Follow all the instructions in this manual carefully and heed all safety precautions. Improper use of this diving helmet could result in serious injury or death.

⚠ DANGER

Kirby Morgan Dive Systems, Inc. (KMDSI) warns all divers who use the Kirby Morgan diving helmet to be sure to use only KMDSI original parts from a KMDSI authorized dealer. Although other parts, O-rings and fittings may appear to fit on Kirby Morgan diving helmets, they may not be manufactured to the same standards maintained by KMDSI. The use of any parts other than KMDSI original parts may lead to equipment failure and accidents.

⚠ DANGER

Diving in waters that are chemically, biologically, or radiologically contaminated is extremely hazardous. Although Kirby Morgan diving helmets may be adapted for use in some contaminated environments, special training, equipment, and procedures are necessary. Do not dive in a contaminated environment unless you have been thoroughly trained and equipped for this type of diving.

Read this manual before using or maintaining the helmet, even if you have experience with other diving helmets. If you have purchased the helmet new from a dealer, be sure to send in the warranty registration card so we may keep you informed of any safety notices that affect this product. If you resell or loan this helmet to another diver, be sure this manual accompanies the helmet and that the person reads and understands the manual. In addition to the manual a log book should be used to log all repairs, maintenance and use.

⚠ DANGER

Diving is a life threatening occupation. Even if you do everything right you can still be killed or injured. None of the models of Kirby Morgan helmets or masks can prevent accidents, injuries or death due to improper training, poor-health, improper supervision, improper job requirements, improper maintenance or acts of God.

⚠ WARNING

This helmet was completely checked and should be ready to dive as it was shipped from the factory. However, it is always the diver's responsibility to check all the components of the helmet prior to diving.

⚠ WARNING

Any and all fiberglass repairs done to this helmet MUST be done by a KMDSI factory trained repair facility. Painting is not recommended by KMDSI. Furthermore, many diving companies will not allow painted helmets to be used because painting can mask previous fiberglass damage. KMDSI certified technicians are not responsible for certifying helmets free from damage during annual overhauls.

Helmet shells can be re-gel coated by authorized/certified KMDSI trained technicians that have received fiberglass training by KMDSI. Helmets that are to be painted for cosmetic purposes, should be first, certified free of fiberglass damage by an authorized KMDSI technician certified in fiberglass repair. A log entry should be made in the helmet log that the helmet was free of damage prior to painting. Keep in mind other KMDSI technician can refuse to work on helmet shells that have previously been painted or repaired by non KMDSI certified persons.

This manual is supplied to the original purchaser of this helmet. If you have any questions about the use of the helmet or you need another copy of this manual, Part Number 100-073, contact KMDSI or your nearest KMDSI dealer or may be downloaded free from the KMDSI website at www.KirbyMorgan.com.

If you have any questions regarding the use, maintenance, or operation of this helmet, contact KMDSI at (805) 928-7772, fax: (805) 928-0342, or e-mail: info@kirbymorgan.com.

WARNING



Kirby Morgan masks and helmets are cleaned and lubricated for oxygen service when they come from the factory. However, if the helmet is used with an oil lubricated air compressor, contamination with hydrocarbons may result. If the breathing system in the helmet is exposed to hydrocarbons, it must be cleaned for oxygen service and lubricated with oxygen safe lubricants before using it again with breathing mixtures containing a high percentage of oxygen. If this is not done, fires and explosions may result, exposing the user to serious personal injury or death.

Components requiring lubrication, should only be lubricated with oxygen compatible lubricants such as Christo-Lube®, Fluorolube®, or Krytox®. Lubricants must be used sparingly and should not be mixed with other lubricants.

DANGER

KMDSI helmets and masks are intended for underwater use only and should only be used by qualified divers that have received proper training in the use of this type of equipment. KMDSI helmets and masks should not be used or worn without the appropriate life support systems, such as air or gas supplies and support personnel as described in this manual.

KMDSI helmets and masks should never be used for motor sport racing, aviation / space craft use, or for chemical warfare use. The helmet must never be used by persons in poor physical condition, by persons with previous head neck or back injuries which could be aggravated by its use. The helmet should not be used by persons under the influence of drugs or alcohol. Furthermore, infants, children, or persons under the age of 18 should never wear KMDSI helmets and masks. Failure to pay heed to the above could result in serious injury or death.

DANGER

Never use the helmet without first completing all pre-dive maintenance and set up procedures.

DANGER

Do not use KMDSI masks or helmets in currents exceeding 3.0 knots. Use in currents greater than 3 knots may allow water to enter the exhaust valve, possibly causing regulator flooding.

WARNING

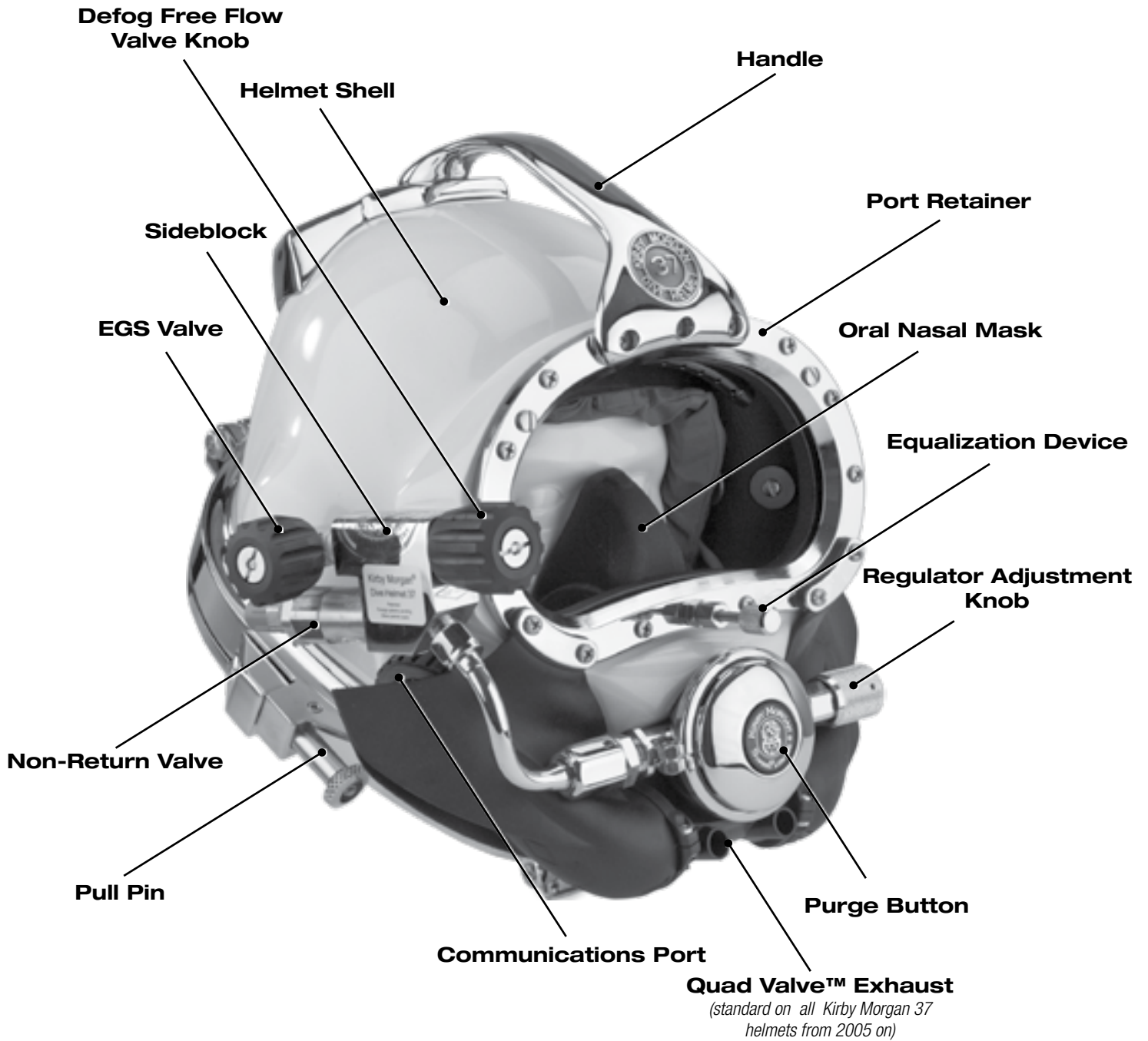
Surface-supplied diving can be a strenuous activity. Most Kirby Morgan helmets weigh in excess of 27 pounds. KMDSI recommends that persons with a previous neck or back injury seek professional medical approval prior to engaging in surface supplied diving operations using any Kirby Morgan helmet. Use of any Kirby Morgan helmet with a pre-existing physical/medical condition may result in death or serious injury.

The information contained in this manual is intended to aid the user in optimizing the performance of this helmet. The application of some of this information will depend on the diving situation and the use of associated equipment. Many countries have specific laws and rules regarding commercial diving. It is important for the user to understand the rules, regulations, and philosophy imposed by the governing, regulating bodies whenever using commercial diving equipment.

Whenever KMDSI helmets or masks are used in European Countries, which have adopted the C.E. certification programs, they must only be used with C.E. certified components. Diving operations should only be conducted within the

Kirby Morgan® 37 & 57

limits of the operational specifications, and in accordance with the rules and regulations established by the governing authority in the specific country or geographical location where the diving operations are being conducted. If you have any questions concerning this manual or the operation of your helmet, contact KMDSI (805) 928-7772 or at info@KMDSI.com or Dive Lab Inc. (850) 235-2715 or at Divelab@aol.com



The Kirby Morgan 37 helmet



