EXO-26
Balanced Regulator
Full Face Mask

PRODUCT DISCONTINUED FROM CE MARKET SINCE 2017:
THIS MANUAL IS PRESENTED IN ITS ORIGINAL FORM.

Document #211108002
Document P/N 100-131

WARRANTY

USE ONLY KIRBY MORGAN® GENUINE PARTS

Kirby Morgan Dive Systems Inc., (KMDSI) warrants every new helmet, BandMask®, Full Face Mask, SCUBA regulator or air control system (KMACS 5) (each, a Product) to be free from defects in workmanship for a period of three hundred sixty five (365) days from the date of purchase from a KMDSI authorized dealer. This warranty covers all metal, fiberglass, and plastic parts, but does NOT cover rubber parts, communications components, head cushions, chin cushions, or foam spacers.

Any defect of the product in workmanship or material covered by this warranty discovered within three hundred sixty five (365) days from the date of purchase must be promptly communicated in writing to the nearest authorized KMDSI dealer or (if no such dealer in the buyer's country) contact KMDSI directly at (805) 928-7772. No Product returns will be accepted by KMDSI without a returned merchandise authorization (RMA) number from KMDSI. Upon receipt of the RMA from KMDSI, the buyer should return the defective Product or part, freight prepaid, to an authorized KMDSI dealer or the KMDSI plant, as directed by the RMA department. KMDSI will repair or replace the Product at no charge, within a reasonable time, as it deems necessary.

THIS WARRANTY IS NULL AND VOID IF:

1) The Product is not registered with KMDSI within ten (10) days of purchase, or

2) The Product has not been properly serviced and/or maintained by KMDSI factory trained/approved personnel, according to factory recommended procedures provided in the manual, along with the KMDSI Appendices Checklists, and/or Product updates have not been performed as recommended by KMDSI, or

3) Unauthorized attachments or modifications have been made to the Product, or

4) The Product has been used for purposes other than those for which it was designed, or otherwise has been abused, misused, or subjected to unusual conditions, or the Product's intended service has been exceeded.

EXCEPT AS SPECIFICALLY PROVIDED HEREIN, THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE HELMETS, BANDMASKS AND AIR CONTROL SYSTEMS COVERED BY THIS WARRANTY ARE MARKETED AND SOLD BY KMDSI SOLELY FOR COMMERCIAL OR INDUSTRIAL USE AND ARE NOT A CONSUMER PRODUCT INTENDED FOR PERSONAL, FAMILY, OR HOUSEHOLD USE.

In purchasing any Product subject to this warranty, the buyer agrees that its sole and exclusive remedy and KMDSI's entire obligation in contract, tort, or otherwise under this contract will be repair or replacement at KMDSI's option of the Product or any parts which KMDSI determines during the applicable warranty period are defective in workmanship or material covered by this warranty. All exchanged parts are the property of KMDSI. The buyer's exclusive remedy and KMDSI's entire liability in contract, tort, or otherwise is the payment by KMDSI of the buyer's actual damages up to but not to exceed the amount paid by the buyer for the Product.

In no event shall KMDSI be liable to the buyer for indirect, special, incidental or consequential damages (including, but not limited to, damages for lost profits, lost sales, loss of business opportunity, or for injury to persons or property arising out of the use of the Products). Any claim or action for breach of warranty must be commenced within one year following delivery of the Product to the buyer.

Buyer acknowledges that this warranty is the sole and exclusive warranty of the Product and that it supersedes any and all oral or written representations and undertakings between KMDSI, its dealers, and the buyer relating to the Products. This warranty allocates the risks of product failure between KMDSI and the buyer, which allocation is recognized by both parties and is reflected in the price of the goods. The buyer acknowledges that they have read this agreement, understand it, and are bound by its terms.

IMPORTANT: Please register your purchase online at **www.kirbymorgan.com/support/product-registration-form**. If you have a problem with the online registration, please contact your Kirby Morgan dealer, or Kirby Morgan directly by calling (805) 928-7772, or email sales@kirbymorgan.com.

Kirby Morgan® thanks you for your purchase.

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Definitions of Signal Words and Terms Used in this Guide

The original language of the Kirby Morgan Manuals is English. Translation into other languages will be provided upon request. KMDSI may charge a fee for these services.

Throughout this user guide we will use certain words to call your attention to conditions, practices or techniques that may directly affect your safety. Pay particular attention to information introduced by the following signal words:

⚠ 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.

NOTICE

This word is used to address practices not related to personal injury.

This user guide contains important safety information and should always be available to those personnel operating this equipment. Read, understand, and retain all instructions before operating this equipment to prevent injury or equipment damage.

If you sell or loan this equipment to another person, be sure that this user guide accompanies the gear when you transfer possession to them.

⚠ WARNING

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

If you have any questions concerning this manual, contact KMDSI (805) 928-7772 or by Email at kmdsi@KirbyMorgan.com or Dive Lab Inc. (850) 235-2715 or at Divelab@divelab.com

⚠ CAUTION

Kirby Morgan Dive Systems, Inc. declines all responsibility for accidents due to an incomplete understanding of the equipment.

⚠ CAUTION

This mask should be used only with breathing air meeting requirements of EN132 standard, Appendix A.

NOTICE

This mask should be used only with equipment and accessories which are CE approved according to EN250.

⚠ CAUTION

This mask should be used only with equipment using open circuit compressed air. The use of an oxygen enriched atmosphere is dangerous and not allowed

NOTICE

In accordance with the EN250 standard, the maximum approved depth for the use of the equipment is 50 meters (164 feet).

⚠ CAUTION

Never use a solvent to clean the mask. Never use aerosol sprays on or around the mask as certain solvents and propulsion agents attack and damage rubber and certain plastics.

⚠ CAUTION

In order to use this mask it is ABSOLUTELY NECESSARY that you follow a training course and RECEIVE CERTIFICATION, issued by a competent training organization, confirming your ability to dive. Use of a mask by untrained and unqualified personnel is DANGEROUS and could lead to serious accidents, and/or death. Use of this equipment by a person who does not possess certification issued by an appropriate organization renders void any guarantee, express or implied, on this product. This mask, as supplied, is intended to be used for Scuba diving.
Before each use the mask should be carefully checked and submitted to the operational tests. NEVER DIVE with a mask showing any signs of deterioration or which has a below normal performance.

NOTICE

The hoses fitted to the EXO-26 Full Face Mask, and supplied by KMDSI, meet the requirements of the EN250 standard concerning the connection of components. Only original Kirby Morgan hoses should be used as replacements.

- HP thread 7/16" - 20 UNF
- MP thread 3/8" - 24 UNF

Always allow pressure to build up slowly in the regulator by turning on the cylinder valve SLOWLY.

Use only silicone grease on the rubber components. Never grease the parts of your mask with a lubricant containing hydrocarbons, household oil, or motor oil.

Before diving in cold water (water temperature below 10 °C / 50 °F),

you should first obtain specialized training and certification in the appropriate techniques from a competent organization. You should also use equipment intended for this purpose.

The use of a CE approved first stage regulator with a silicone oil chamber will reduce the possibility of first stage icing causing failure. Also, the diver should have been trained and have mastered the techniques of cold water diving so as to be able to take all precautions necessary to avoid freezing of the regulator. All of this is included in the training programs of organizations offering courses in diving in cold water or under ice.

In order to reduce the risks of regulator freezing when diving in cold water (below 10 °C), consider doing the following:

1 - Protect your regulators from any accidental ingress of water into the first or second stages.

2 - Protect your equipment from cold before the dive. More precisely, keep your mask and all its accessories in a warm dry place.

3 - Carry out all pre-dive checks of your equipment in a warm dry place if necessary, before even going to the dive site.

4 - Avoid breathing through the regulator or pressing the purge button in very cold air before entering the water.

5 - As far as is possible, avoid excessive effort during the dive.

6 - Check that the air used to fill your cylinder is dry. The water vapor contained in this air should have a condensation point below -54 °C. Excess water vapor can freeze, causing a free flow, or can block the air flow completely.

The EXO-26 Balanced Regulator Full Face Mask described in this guide was inspected and certified by a notified testing institution in compliance with EC directive 89/686 of 21 December 1989. Testing procedures were in accordance with the same directive that sets forth the marketing conditions and key safety requirements for Personal Protection Equipment (PPE Category III) regarding product quality assurance and according to the European Standard EN 250.

REFERENCES TO EN 250 - OBJECT- DEFINITIONS - LIMITS

Object: The requirements and tests provided for in EN 250 are aimed at

providing a minimum safety level for the operation of diving breathing apparatuses at a maximum depth of 50 m / 164 feet.

Scuba - Definition (EN 1 32): Self-contained, open-circuit compressed air underwater breathing apparatus is an apparatus which has a portable supply of compressed air carried by the diver, allowing him to breathe underwater.

Scuba- Minimum equipment (EN 250):

a) Air cylinder/ cylinders

b) Demand regulator

c) Safety device, e.g. pressure gauge / computer or reserve or alarm.

d) Carrying frame or holding device for air cylinder(s) to mount the harness or carrying system, e.g. backpack and/or straps.

e) Face piece: mouth piece assembly or full face mask or diving helmet.

f) Operating instructions.

SCUBA - Component Units (EN 250): The **EXO-26 BALANCED REGULATOR FULL FACE MASK** described in this guide is to be used only with the KMDSI first stage regulator certified together with this mask according to EN250. It may be combined with other SCUBA components such as cylinders and pressure gauges certified in compliance with EC directive 89/686 and EN 250. The air contained in the cylinders must comply with the requirements for breathable air set forth in EN 1 32 - Appendix A.

DEFINITIONS (EN 250)

COLD WATER DIVING: water temperature below +1 0 °C (50 °F).
WARM WATER DIVING: water temperature over +1 0 °C (50 °F).
MAXIMUM DEPTH: 50 m / 164 feet.
STORAGE TEMPERATURES: +70 °C / -30 °C (max/min)

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Chapter 1 EXO-26 Balanced Regulator Full Face Mask

1.1 Introduction

KMDSI has been designing and manufacturing SCUBA, commercial, scientific, search & rescue, and military diving equipment for over fourty years. Many of our products have become the standard of the industry due to their design, high quality, and outstanding performance. The Balanced Regulator EXO-26 are part of this continuing tradition.

NOTICE

This user guide gives the user basic daily operational information for the EXO-26 Balanced Regulator Full Face Mask. For detailed maintenance and use information, please refer to the EXO-26 Operations and Maintenance Manual, KMDSI part # 100-030.

The following is a list of features to be found on the Balanced Regulator EXO-26:

1. Fully Adjustable Regulator:
   The regulator is fully adjustable over a wide range of operating pressures. By simply turning the Adjustment Knob while diving, you can "tune" your regulator for your type of diving.

2. EXOthermic™ Exhaust System:
   The regulator assembly in the Balanced Regulator EXO-26 isolates the intake and exhaust chambers from one another. The diver's own breath assists in reducing thermal drain by warming certain areas of the regulator. This helps to eliminate freeze ups in cold water diving.

3. Earphone Pockets:
   The earphones are allowed to equalize because all interior parts of the mask share a common cavity. There is never a need to adjust their position and they are easily accessible.

4. EXOskeleton:
   The outer frame, or EXOskeleton, serves several functions. It protects the face seal and is used to mount external components, such as the regulator, lens, and communications.

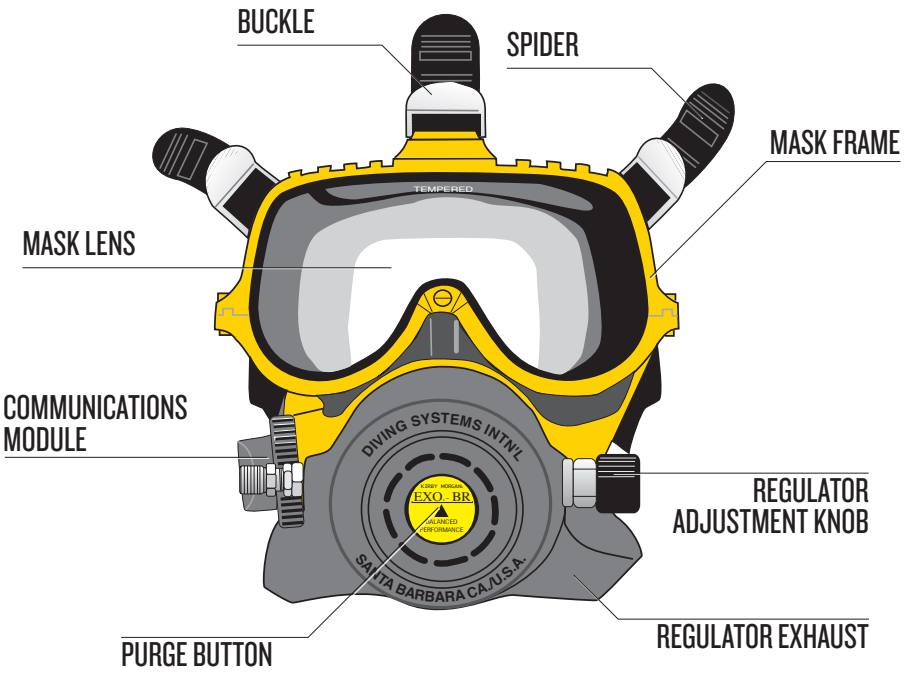
5. Suspension Face Seal:
   The suspension area of the face seal is attached to the EXOskeleton by five mounting legs, much like a trampoline. In this way, the seal allows the face to seal on a soft flexible area. This means the EXO-26 will fit many different sizes and shapes of faces. The extra area behind the face seal allows a foam pad to be inserted for extra small (narrow) faces.

6. Modular Communications:
   Microphone and earphones can be easily and quickly replaced. Simply remove the mounting nut and push the entire module to the inside of the mask. The earphones can then be removed. A spare communications set is recommended for rapid replacement in the field if needed.

7. Oral Nasal:
   The oral nasal on the Balanced Regulator EXO-26 full face mask lowers CO_2 levels, and improves communications.

8. Equalizer:
   An ear equalizing device (nose block device) is now a standard feature on both masks and is used to equalize the divers ears. This device is easily adjustable and fits a variety of noses and faces.

9. Balanced Regulator:
   The EXO-26 has been supplied with a balanced regulator. This balanced regulator has an adjustment knob for adjusting to a wide range of operating pressures.



1.2 Design Purpose

The Balanced Regulator EXO-26 Full Face Mask may be used with SCUBA gear.

The Balanced Regulator EXO-26 permits nearly normal speech, making the mask an excellent choice for use with wireless communications. The mask is also well suited for ice diving operations and has been used successfully in the Arctic under subzero conditions. It is an ideal mask for light commercial work, for the diving scientist, and for search and rescue operations. Many search and rescue teams use the EXO-26 for diving in biologically contaminated water.

⚠ CAUTION

Contaminated water diving operations are extremely hazardous. They should NOT be attempted unless all members of the dive team have been trained for this type of diving. You must check to ensure that every piece of the diver's equipment is compatible with the contamination to be encountered. If there is the slightest doubt regarding what contaminants are in the water, the diver must NOT dive.

⚠ WARNING

Do not dive this mask in water containing high concentrations of petroleum based chemicals. Clean the mask using only mild detergent and water.

1.3 Specifications

Weight: 4.65 Pounds

Construction:

-EXOskeleton / PolyCarbonate
-Face Seal / Neoprene Blend
-Regulator Body / Noryl®
-Hardware / Stainless Steel & Chromed Brass
-O-rings / Buna N
-Spider / Neoprene
-Equalizer / Urethane

Recommended Lubricant: Silicone Grease, Dow Corning® Molykote® 111. Balanced EXO-26 Regulator Operating Pressures: 115psi-250psi over ambient.

Optional Communications Systems:
8 ohms, accepts hardwire or wireless systems.

⚠ CAUTION

The Balanced EXO-26 is not intended for oxygen service or use with higher partial pressures as in compressed air.

1.4 CR Marking

The EXO-26 BR_Balanced Regulator meets or exceeds all standards established by Dive Lab of Panama City, Florida, and is CR (Commercially Rated) marked.

1.5 CE Certification

The EXO-26 BR Balanced Regulator (P/N 325-772) has been tested and conforms to the performance requirements as set forth in Annex II of Directive 89/686/EEC and, as far as applicable, the EN15333-1.

The Kirby Morgan EXO-26 BR Balanced Regulator P/N 325-772 is fully CE marked.

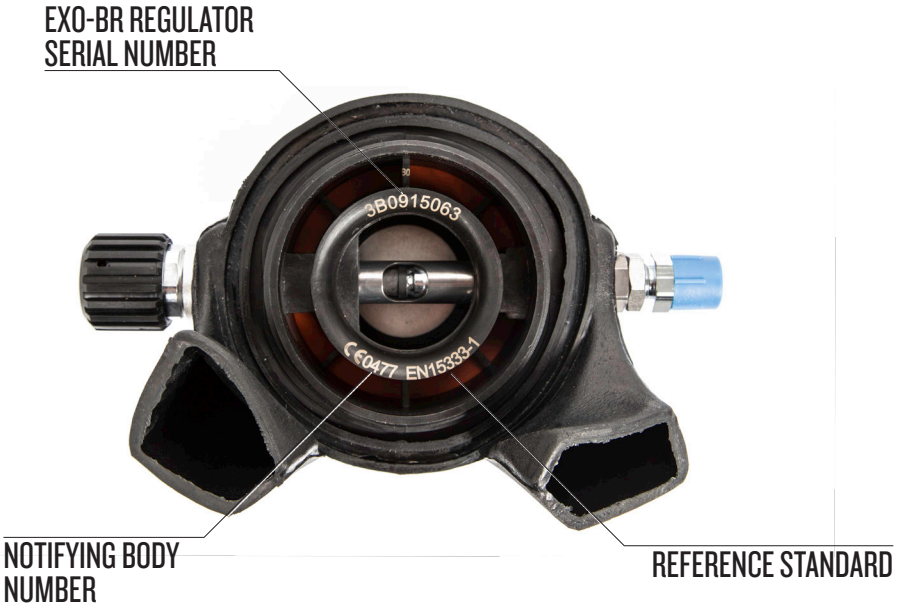
Category of PPE: III

⚠ WARNING

The EXO-26 BR Balanced Regulator has been tested with air and CE certificates for use with air up to 50 meters. Compressed air must be compliant with the EN 12021. All the tables reporting the technical data and the pressure of use are relative to compressed air.

1.6 Serial Number Location

The serial number is printed on the interior of the EXO-26 BR Balanced Regulator.



The above diagram shows where to find the serial number, notifying body number and reference standard on the interior of the EXO-26 BR Balanced Regulator.

On the inside of the regulator the following information (as shown in the image preceding):

1. The name and the address of the manufacturer
2. CE marking: CE 0477
3. Notifying Body Number
4. EN15333-1

⚠ CAUTION

The user cannot:

- **Remove the mark from the frame/label of the EXO-26 BR Balanced Regulator.**
- **Modify or counterfeit the data reported on the frame/label.**

⚠ CAUTION

The data shall be visible and legible throughout the life of the EXO-26 BR Balanced Regulator. If the data deteriorates or is not legible the user shall contact the manufacturer.

1.7 Notified Body

The Notifying Body is	Eurofins Product Testing Italy Srl
Address:	Via Courgnè, 21 10156 - Torino - ITALY
Identification number:	0477

Chapter 2 Operating Instructions

This section provides the manufacturer's recommendations on how to use the Balanced EXO-26 Full Face Mask. The use of this diving mask will vary with the type of diving and environmental conditions. A proper training program in the use of full faced masks must be undertaken. Practice using the mask in a calm, clear body of water (pool) before using for open water diving.

2.1 Receiving The Mask

When you first receive your Balanced Regulator EXO-26 Full Face Mask, carefully unpack it and examine it for any damage that may have occurred during shipment. Use the inspection sheet provided to ensure that no damage has occurred!

Register your EXO-26 BR Balanced Regulator within 10 days of purchase on the KMDSI website. Warranty claims require that the EXO-26 BR Balanced Regulator be on file at KMDSI 10 days after purchase.

2.2 Before You Dive!

Before dressing in for a dive, an inspection of the mask and all related gear should be made to insure everything is in proper working order. This should be done well in advance of the dive, so any problems or

adjustments can be dealt with. **Read and understand this manual before you dive.** This chapter gives basic operating procedures and how to perform the pre-dive mask inspections and pre-dive regulator function tests. Refer to Appendix A2.1, found on either the Kirby Morgan or Dive Lab website.

2.3 Visual Inspection

Visually inspect the entire exterior and interior of the mask.

- The face seal should be in good condition with no cracks, tears, or punctures.

- The spider (head harness) should be intact. Stretch the spider and inspect it carefully for signs of cracking or tearing.

- Inspect the face port. It should be clean and clear. Anti fog solutions should be applied prior to use.

- Check the communication module mount nut to ensure it is screwed down tight.

- Inspect the oral nasal and Equalizer and make sure that they are securely mounted.

- Check the regulator assembly to ensure it is secured tightly on the mask frame.

- Check the regulator cover to ensure it is tight on the regulator body.

- With no air to the mask, screw the regulator adjustment knob all the way out and back in to be sure it turns freely.

2.4 Clean The Face Port

Remove any sand or debris from the interior of the mask and face port which may interfere with the divers vision, be inhaled, or blown into the divers face.

Under certain conditions, depending upon water temperature, you may find it necessary to prep the mask lens to keep it from fogging while diving. There are a number of commercial defoggers available for scuba diving which work well. Follow the directions on the label for use. If no commercial preparation is available it is possible to use soap. Use a small amount of liquid soap on a rag and smear a thin film on the inside of the lens. Do not rinse this film off. Apply the soap just prior to entering the water.

2.5 Adjusting The Equalizer

The Equalizer can easily be adjusted. Simply peel the Equalizer out of the Wire Retainer and reposition it in another one of the molded grooves in the Equalizer. The Wire Retainer can also be slightly bent in one direction or another, up or down, to get the angle of the Equalizer just right. Insure that the corners of the Equalizer grooves are "snapped" into position on the Wire Retainer so that it does not come loose.

2.6 Checking Regulator Functions And Preparing The Mask For Use

Attach the low pressure hose that is supplied with the mask, to the low pressure (L.P.) port on the 1st stage regulator and then to the mask. Never connect the hose or mask to a high pressure (H.P.) port. When attaching the hose to the regulator ALWAYS USE A BACK UP WRENCH ON THE NIPPLE TUBE.

⚠ CAUTION

A backup wrench must be used on the hex fitting of the regulator when tightening. Otherwise the regulator may come out of adjustment!

Prior to attaching the first stage regulator to your tank, be sure the regulator adjustment knob on the mask is screwed all the way in. This will prevent the regulator from free flowing when the air is turned on.

Your first stage regulator shall be equipped with a safety device such as a submersible pressure gauge. Attach the first stage to your tank and turn the air on while holding the submersible pressure gauge away from you. Once the air is on, check the pressure gauge to ensure you have a full tank.

⚠ CAUTION

A submersible pressure gauge is considered essential for full face mask scuba diving. The diver must plan his dive to avoid running out of air while wearing a full face mask. There is no way to safely buddy breathe underwater, use an octopus rig, or snorkel on the surface while wearing a full face mask. If the submersible pressure gauge should fail during the course of a dive, the dive should be terminated immediately

Check the mask regulator for pre-dive adjustment and function. The

Balanced Regulator EXO-26 masks are preset at KMDSI with an intermediate pressure of 135-145 psi. Starting with the regulator adjustment knob screwed all the way in, back the regulator adjustment knob out 3 full turns. There should be no indication of air flow through the mask if the intermediate pressure on your first stage regulator is set at around 135-145 psi. Higher first stage regulator pressures may cause free flow, but turning the regulator adjustment knob in, should stop the flow. In the unlikely event there is still flow, proceed to the regulator adjustment section in chapter 5 of the EXO-26 Operations and Maintenance manual (Part # 100-030) to reset the regulator.

Loosen all the straps on the Spider and hold the mask on your face. Take a couple of good breaths. Breathing slow and soft at first then hard and fast. The regulator should be operating with the minimal amount of breathing resistance and no free flowing. Any type of an air flow "hiss" should be able to be adjusted out by using the adjustment knob. If the adjustment knob is adjusted all the way in and the regulator still hisses, see the regulator adjustment section in chapter 5 of the EXO-26 Operations and Maintenance Manual.

Press the purge button a couple of times. There should be a fairly strong air flow into the mask. If there is no flow when pressing the purge button, or if the regulator is hard to breath, see the regulator adjustment section in chapter 5 of the EXO-26 Operations and Maintenance manual.

Once you enter the water the regulator can be adjusted for a variety of diving conditions and positions just by turning the adjustment knob in or out.

2.7 First Stage Regulator

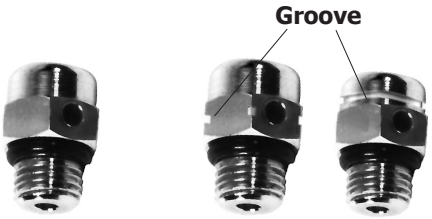
The first stage regulator used on the air supply bottle shall be a CE approved high-flow unit such as the KMDSI SuperFlow® regulator. A submersible pressure gauge shall be connected to the regulator to enable the diver to monitor the status of his air supply.

The Super Flow® 1st Stage Regulator is Part # 305-161.

2.8 Overpressure Relief Valve

The first stage regulator must be fitted with a KMDSI High Flow Overpressure Relief Valve (Part # 200-017). This valve is included with the Balanced EXO and must be installed in a low pressure port on the first stage regulator. The purpose of this valve is to allow the regulator to bleed off excess pressure should the first stage develop an internal leak. If the first stage leaks and this valve is not present, the pressure between the first stage regulator and the second stage could increase until the hose ruptures. This will cause a complete loss of the air supply. It could also lead to injury of the diver due to the whipping action of the hose. Part # 200-017, Overpressure Relief Valve

The KMDSI Overpressure Relief Valve has been manufactured in two different flow rates. The original valve had a lower flow rate than the current valve. The newer valve has been marked in two ways, the first being a groove around the flats of the hex. Currently the valve is marked with a groove around the top of the body. This is the same valve, just different markings.



OLD 200-015 NEW 200-017

Do not use the older KMDSI Overpressure Valve Part # 200-015. It does not have the groove cut in the valve body.

⚠ CAUTION

The certified KMDSI first stage regulator used with the EXO-26 MUST be equipped with a KMDSI High Flow overpressure relief valve. In the event the first stage leaks there is no way for the pressure in the hose attached to the second stage to relieve itself. The hose may rupture, leading to a loss of air supply and possible personal injury to the diver.

2.9 Recommendations For Donning Or Removing The EXO-26

Become familiar with the way in which the mask attaches and properly fits your face. Because the face seal fits the face well when loosely fitted, it is easy to assume that this is how the mask should be worn. This assumption is incorrect and can cause negative results when diving.

Wearing the mask with an incorrect adjustment will not allow the divers face to go far enough into the mask. The air space inside the mask will be excessive causing possible buoyancy and problems with the fit of the seal and oral nasal. The main portion of the face seal is very flexible and should be stretched to form a proper seal.

The spider (head harness) and buckles are also important for proper function of the face seal. The spider legs and rear head cup are all shaped to pull the mask up to the face. The head cup should be placed as low as possible to reduce jaw fatigue. The buckles swivel (except the top) to allow the spider to find its natural correct position. Do not try to force the buckles to swivel completely around. They are allowed free but limited movement to keep the spider from becoming entangled while the mask is being handled.

2.10 Donning The Mask

1. Make sure that all other gear is properly donned, the air is on, and regulator functions and communications tests have been done.

2. Make sure all 5 legs of the spider are loosened all the way.

3. While holding the mask in position by the chin cup, begin tightening the spider at the bottom straps, but not all the way.

4. Make sure the cup of the spider is centered on the back of your head. It should be low, but not down on your neck.

5. Next, tighten the top two straps above the temples. Alternate between top and bottom straps until the face is positioned properly and snugly into the mask.

The mask is usually the most comfortable when your nose is partially into the nose pocket. The top center strap can be tightened slightly to give support to the mask while standing by for water entry. Once in the water this top strap may be loosened. Sometimes, if the top strap is too tight and the diver's hood fills with air while diving, the hood pushing against the top strap may cause the mask to lift up on the face. The spider may be readjusted during a dive.

2.11 Removing The Mask

1. Grasp the bottom of the mask on each side where the buckles are attached.

2. With your thumbs, push the tabs on the buckles all the way forward. They will stop traveling once they hit the buckle caps. Hold the buckles forward.

3. At this point, push the bottom portion of the mask away from the face as if it were hinged to your forehead. This will release the bottom legs of the spider and allow quick and easy removal of the mask.

2.12 Proper Hood Fit

The type of hood that a diver chooses may have direct bearing on the fit and comfort of the Balanced Regulator EXO-26. Excess material on the chin and or jaw will keep the mask from positioning properly and possibly cause jaw fatigue. This may also prevent the diver's face from getting far enough into the mask. If using a neoprene wetsuit hood, you may want to trim material from the cheek bone downward to under the front part of the chin.

When using a dry suit with a latex hood, no adjustment should be needed. However, if the hood covers too much of your face, you may want to trim these areas.

To properly trim your hood, use the following procedure:

1. With the hood in position on your head, don the mask as outlined in this chapter.

2. Have someone bend the earphone pockets forward and start marking the hood at the edge of the face seal, starting at the cheek bone area, then go down under the chin and up the other side to the opposite cheek bone area.

3. Remove the mask and hood. Leave approximately 1/4" extra material from the line marked and trim the excess material away.

Your hood should now work very well with the mask. Because the face is in a dry air cavity being warmed by body heat, hood material on the face is not needed to keep the face warm.

KMDSI makes a hood tailored to the Balanced Regulator EXO-26. It must be trimmed in the same fashion as above. The face seal area is a thinner, two sided skin neoprene for a superior seal.

A small hole can be punched in the top of the hood to relieve any build up of air inside. Put the hole or holes on either side of where the top spider strap lays.

Chapter 3 In Water Operations

3.1 Introduction

This section deals with the different functions and adjustments that are possible after entry into the water. Some divers may be satisfied with the fit and function of the mask as it is set up top side, or it may be easily adjusted in the water if necessary.

3.2 Water Entry

Many methods of entry into the water are possible using the Balanced Regulator EXO-26, but a few important points should be noted. When using the giant stride entry, the bottom 7 holes in the exhaust whisker should be covered to prevent any turbulent water from flowing past the exhaust valve.

If you roll into the water backwards, turn your head to one side before entering to prevent water from washing past the face seal to the interior of the mask. In the event water does enter the mask, keep the regulator positioned low and simply press the purge button to remove the water.

3.3 Regulator Adjustment

The adjustment knob should be set for easy breathing on deck. Once in the water, the adjustment may be changed to compensate for work rate, depth, diver position, or affects of current or turbulence on the diaphragm.

The most noticeable difference in breathing resistance can be found in a face up position. Resistance increases with the regulator diaphragm in this position.

If the regulator adjustment knob is adjusted all the way in and breathing resistance is high, it is sometimes possible when the mask is not fitted properly, for small amounts of water to get past some areas of the face seal. Any leakage which does occur usually enters in the temple area. Backing out on the adjustment knob will lessen resistance on the diaphragm to prevent any leaking. If leakage still persists, a face cushion kit (Part # 325-025) is recommended. Fine tuning the regulator should be common practice if you maintain a certain position for any length of time and then change positions. If you are working in a face down position and the regulator adjustment knob is adjusted too far out, the regulator may free flow. The adjustment knob should be turned in to stop any excess air flow.

3.4 Spider Adjustment

The mask can be repositioned if needed, while in the water, by loosening, repositioning and retightening the spider legs. The large tabs on each buckle provide this easy adjustment. It should also be noted that the buckle travel is limited to allow easy release.

The top leg of the spider can be loosened once in water. It is possible for the top leg to be too tight which will cause the mask to be pulled up too far on the face. The main purpose for the top leg of the spider is to provide on deck support of the mask. Some divers may prefer the support of the top leg while in the water, too.

NOTICE

Proper hood fit and spider adjustments are needed for the mask to fit comfortably and function correctly.

3.5 Purging Water From The Mask

If the mask is removed and replaced underwater, it must be cleared of water (purged). This is done by simply holding the mask firmly on the face, keeping the regulator in a low position, and depressing the purge button. A slight momentary overpressure will be felt, followed by complete removal of all water from the interior of the mask. A mask completely filled with water, should take no more than 3 seconds to completely purge.

⚠ CAUTION

In the unlikely event the mask should fill with water, depressing the purge button should clear the mask. In the event of a complete continuing flood, the adjustment knob should be turned out to cause a regulator free flow. The diver should then immediately assume a face down position in the water to prevent the mask from flooding again. At this point the diver should exit the water immediately.

Chapter 4 Post Dive Procedures

4.1 Post Dive Rinse

The mask should be rinsed thoroughly with fresh clean water and the post dive procedures followed after each day of diving.

1. If the mask is equipped with communications, remove and perform maintenance as described in the following chapter.

2. The Balanced Regulator EXO-26 should be rinsed with the regulator hooked up and pressurized. This will prevent water from entering the balance chamber during rinsing.

3. Thoroughly rinse the entire interior and exterior of the mask with warm (20 °C ± 5) fresh clean water to remove any salt deposits or other substances. Insure that all the sand and debris are removed from between the EXOskeleton and mask seal and all the salts are removed from the regulator.

4. Purge the regulator and try to get as much water out of it as you can, then blow dry the mask with compressed air or let air dry completely.

5. Disconnect the regulator and turn the adjustment knob all the way out.

6. Lay the mask face down so that no water will collect in the ear pockets. DO NOT dry in the direct sunlight or let mask sit in the direct sun light for long periods of time, as this will degrade the rubber.

4.2 Reassembly Of The Mask

Insure that all the parts and assemblies are completely dry before assembling or storing.

1. Install the oral nasal and equalizer if they were removed.

2. If so equipped, install the communications in accordance with chapter 6 of the EXO-26 Operations and Maintenance Manual (KMDSI part # 100-030).

3. When storing the mask, make sure the regulator adjustment knob is backed all the way out. This will prevent wear to the regulator seat and lengthen its useful life. Store the mask with the earphone pockets facing straight back or inward. This helps the rubber keep its shape.

4.3 Periodical Maintenance Of The Mask

Refer to Appendix A2.1, found on either the Kirby Morgan or Dive Lab website for a complete list of mask maintenance.

Replace all of the O-rings at least once a year.

Replace the inlet valve on your mask every six months or 200 operating hours, whichever comes first.

Rebuild your entire regulator every year or 400 operating hours, whichever comes first. To perform an entire regulator rebuild (including the exhaust valve) or to replace the face seal, special regulator mounting tools must be purchased. KMDSI highly recommends that Balanced EXO-26 rebuilds, face seal replacements, and frame replacements be done by a factory trained authorized dealer.

4.4 Storage and Transport of the Mask

KMDSI recommends that the EXO-26 Mask be stored and transported to and from the dive site in a heavy duty dive bag.

If the need arrises to ship your EXO-26 Mask, the original shipping box and packaging should be used. However, if you do not have the original shipping box & packaging, the box you place your mask in must be another oversized box (14" × 14" recommended) with flo-pack around it.

Chapter 5 Communications

5.1 Wireless Communications

The mask is designed to be used with wireless communications. There are several manufactures of these units, OTS (Ocean Technology Systems), DiveComm, just to name a few. Read and follow the manufacturer's instructions for these units.

Wireless systems are used in many different types of diving. Some examples include search and rescue, research diving, photography, and SCUBA instruction. With a wireless system it is possible to communicate both diver-to-diver and/or diver-to-surface.

5.2 Testing Communications

The communications system should always be tested and any problems solved or adjustments made prior to the diver entering the water. Procedures will vary between types and manufacturers of communications systems. Follow the manufacturer's instructions on how to test these units.

5.3 Post Dive

If your mask is equipped with any type of communications, post dive maintenance on the mask and communications module must be done after each days dive. The post dive procedures may vary between manufactures, depending on which communication module you are using.

Follow the manufactures instructions on post dive maintenance. The following is the recommended post dive maintenance procedures for the KMDSI communications modules.

1. Remove the communications from the mask. First remove the communications mounting ring by unscrewing it.

⚠ CAUTION

Do not apply any pressure to either the penetrator, or the communications posts, for removal. This could possibly damage the unit.

Reach inside each earphone pocket and grasp as much of the earphone as possible and remove.

⚠ CAUTION

Do not remove the earphones by pulling on the wires. This may damage their interior connections.

2. Remove the microphone from the oral nasal. Once again do not pull on the wire, this can damage the connection.

3. Lightly rinse the assembly with fresh clean water. Do not immerse the entire assembly underwater. Try to keep the water out of the earphone covers and from under the module cover.

4. Dry the assembly off. Open the earphone covers, take the module cover off and let everything on the inside dry.

5. Once everything is dry, reassemble the earphone covers and reinstall the module cover.

⚠ CAUTION

The waterproof case for your wireless communications unit should only be attached to your scuba backpack, never to your weight belt. In the event your belt must be dropped the belt must have a clear drop path and must not be connected to any other piece of gear. If this procedure is not followed the weight belt and wireless electronics case will be attached to the mask by the connecting wire.

Notes

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