



DRYSUIT MANUAL



MANUFACTURED BY

Bare Sports Europe
Factory BLB019C
Bulebel Industrial Estate
Zejtun ZTN3000, Malta

DIRECTIVE

89/686/EEC

REFERENCE STANDARDS

EN 14225-2:2005

RINA Services spa (N.B. 0474)

EXPLANATION OF PICTOGRAMS AND MARKINGS



Wash by hand
maximum temperature 40°C



Do not bleach



Drip line dry in the shade



Do not tumble dry



Do not iron



Do not dry clean

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This manual reflects correct and current information about Hollis drysuits as of June 2017. For your own safety and to ensure you are following the most up to date information and advice, please refer to **www.hollis.com**.

*Les informations dans ce manuel sont courantes et exactes à partir de janvier 2017 aux spécifications des combinaisons étanches Hollis. Pour s'assurer de votre sécurité et que vous suivez les informations et les avis courants, prière de vous référer à notre site web **www.hollis.com***

Ce manuel est aussi disponible en Français.



INTRODUCTION

This user's guide describes the unique functions and features of Hollis drysuits. The more acquainted that you become with your new drysuit, the more you will enjoy your diving experience. By following the instructions in this guide, you will understand how your Hollis drysuit system works, how to make best use of its features and how to ensure it is ideally set up for your needs.

All Hollis products are constructed with the highest quality materials, utilize the latest computer aided design technology, and manufacturing techniques to ensure their highest performance and reliability.

Statement of Limitation:

In consideration of the sale of the drysuit to you, you agree and understand that in no event will Hollis, its distributors or retailers, be held liable for any personal injuries resulting from its operation, or for any other damages whether direct, indirect, incidental, or consequential even if Hollis is advised of such damages.

Some states do not allow the exclusion or limitation of implied liabilities for incidental or consequential damages, so the above statement may not apply to you.



DRYSUIT LIMITED WARRANTY PROGRAM

SEC. 1 - WORKMANSHIP

(FIVE (5) YEAR WARRANTY)

Hollis guarantees, to the original purchaser, that Hollis drysuits (except for the neck, wrist seals, zipper, and valves) will be free from defects in workmanship for a period of five (5) years, from the date of purchase from an authorized Hollis dealer.

SEC. 2 – MATERIAL

(ONE (1) YEAR LIMITED WARRANTY)

Hollis guarantees, to the original purchaser, that Hollis trilaminate material will be free from defects for a period of one (1) year from the original date of purchase from an authorized Hollis dealer.

SEC. 3 – ZIPPERS AND VALVES

(ONE (1) YEAR LIMITED WARRANTY)

Hollis guarantees, to the original purchaser, that the zipper, inflation valve, and deflation valve will be free from defects in material and workmanship for a period of one (1) year from the original date of purchase from an authorized Hollis Dealer.

SEC. 4 – NECK AND WRIST SEALS

(NINETY (90) DAY WARRANTY)

Hollis guarantees, to the original purchaser, that the neck and wrist seals will be free from defects in material and workmanship for a period of ninety (90) days from the original date of purchase from an authorized Hollis dealer or until cut/trimmed for fitting.

Any products (drysuits or related products) determined by Hollis to be defective in material or workmanship in accordance with the above warranties will be repaired or replaced at the sole discretion of Hollis. This shall be free of charge when received at the factory freight prepaid together with the original proof of purchase.



DRYSUIT LIMITED WARRANTY PROGRAM

This warranty does **not** cover, and Hollis shall not be liable for, incidental or consequential damages.

This warranty does **not** cover any damages resulting from misuse, abuse, neglect, alteration (including trimming of seals), failure to perform proper maintenance as instructed, damage caused by contaminants, or unauthorized repair/service.

This warranty does **not** cover any representation or warranty made by dealers beyond the provisions of this warranty.

This warranty does **not** cover costs incurred for normal repair, inspection, and preventative maintenance.

This warranty is a consumer warranty extended only to the original retail purchaser, and does **not** apply to drysuits and related products used for commercial purposes.

You must establish proof of purchase to obtain warranty service or replacement.

Proof of purchase may be established by completing the warranty registration online at the "Product Registration" section of our website at www.hollis.com/registerproduct.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of implied warranties so the above limitations and exclusions may not apply to you.

PROPER USE OF YOUR DRYSUIT

MAXIMUM RECOMMENDED DEPTH

The maximum depth for use of the drysuit is conditional on many factors, including diver's qualifications or experience, physiological condition prior to the immersion, breathing gas mixture, thermal protection, and proper maintenance of the suit. Failure to meet any one or all of these conditions could result in serious health consequences or loss of life.

INFLATION OF THE DRYSUIT WITH AIR

The drysuit should be inflated with air using the low pressure inflation hose supplied with each suit. The inflation hose should be connected at one end to the inflation valve of the drysuit, and the other end to the first stage of the regulator, which itself is attached to the compressed air bottle. To inflate the drysuit, the button on the inflation valve is pressed. This action, along with the deflation valve on the arm, allows the user to regulate the volume of air inside the drysuit.

LIMITATIONS ON USE

Your drysuit is intended for use in an aqueous environment, as long as the presence of certain elements (such as chlorine) is in a range tolerated by human skin. The drysuit does not provide 100% protection to the diver's skin, so it is recommended to avoid immersions in polluted waters in order to avoid allergic reactions or infections. The Hollis drysuit is intended to be worn with undergarments. Depending on the water temperature and the duration of the immersion, it is recommended to wear one or several layers of undersuit for thermal protection. Excessive wear and tear, misuse or negligence when using the drysuit will inevitably result in damage to the material. The knee area always includes standard anti-abrasive material to protect the suit.



SPECIAL WARNINGS

TEMPERATURE RANGE

The drysuit is capable of operating within a range of temperatures. The manufacturer suggests that thermal protection and under garments should be chosen based on the following conditions: water temperature, season of the year, diving depth and level of activity under water. Temperature may influence diving comfort and diving duration, and in extreme conditions may affect your health and safety.

THERMAL PROTECTION

Drysuit isolation depends on the proper under garments and their thermal protection properties. Lack of proper thermal protection may cause thermoregulatory disorders that can cause hyperthermia and hypothermia.

BUOYANCY AND DEPTH

Diver buoyancy should always be neutral. A BCD system should always be worn in conjunction with a drysuit. With depth change, the diver controls buoyancy to avoid damage caused by the hydrostatic pressure or unexpected surface emergence.

THERMAL ISOLATION AND DEPTH

Thermal isolation is reduced due to hydrostatic pressure, which increases with depth. The user must be aware that thermal capacity of the under garments may be reduced.

DRYSUIT COMPATIBILITY

The drysuit is compatible with all standard diving equipment, such as: under garments, mask, fins, BCD, tanks, airways, etc. It is highly recommended that user be trained and familiar with the use of standard diving equipment in conjunction with the drysuit.

ENRICHED GASES

Use of any gas for inflation of the drysuit other than normal air or argon enriched gases, can cause the risk of health and equipment damage. The manufacturer suggests industry approved training prior to use of enriched gas.

ALLERGIC REACTION

Every material, including the materials used to manufacture drysuits, may cause allergic reactions. Please take precautions in ensuring the user is not allergic to the material of which the drysuit is made. These materials include the additional components or features included in the drysuit, such as: neck seal, wrist seals, hoses, seals, etc.





DEFINITIONS

Certain aspects of SCUBA diving in general and SCUBA diving using a drysuit in particular, can be inherently hazardous if ignored or misunderstood.

Hollis uses certain captions throughout this DRYsuit MANUAL to emphasize the importance of following guidelines.

DANGERS, WARNINGS, CAUTIONS & NOTES

Pay attention to the following symbols when they appear throughout this document. They denote important information and tips.

-  **DANGERS** are indicators of important information that if ignored would lead to severe injury or death.
-  **WARNINGS** are indicators of important information that if ignored could lead to severe injury or death.
-  **CAUTIONS** are indicators of information that if ignored may lead to minor to moderate injury.
-  **NOTES** indicate tips and advice that can inform of features, aid assembly, or prevent damage to the product.

If there is any information in this manual that you do not understand, is unclear, or you feel is insufficient, please contact a Hollis Customer Service Representative.

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CONSTRUCTION MATERIALS & METHODS

Hollis offers divers a range of drysuits manufactured from Butyl Trilaminate, providing exceptional materials and construction to meet his or her requirements.

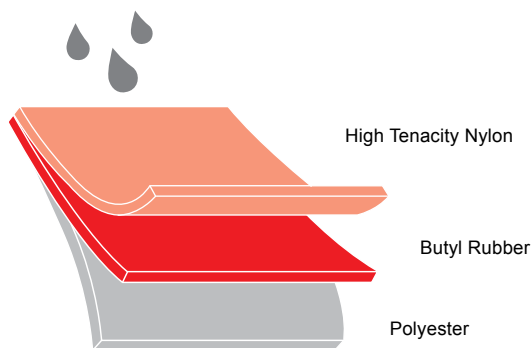
LAMINATE FABRICS

Butyl is a synthetic rubber, or elastomer, that is an excellent choice for drysuit membranes as it is impermeable to air, resistant to many chemicals and remains flexible even at very low temperatures.

HIGH TENACITY NYLON/BUTYL/ POLYESTER TRILAMINATE

This fabric is constructed of a layer of butyl rubber sandwiched between an inner layer of nylon, and an outer layer of extremely durable Nylon Cordura, on the DX300 and Ripstop Polyamide on the BTR500.

TRILAMINATE FABRIC



WATERPROOF ZIPPER

DANGER

It is extremely important to handle the zipper with care when donning a diving drysuit of any kind. Spreading the open ends too far can damage the zipper.

Always lubricate the zipper with the supplied lubricant. This reduces friction and corrosion and helps prolong the life of the zipper. Replacing the zipper in a diving drysuit is an expensive procedure.

WARNING

**Only pull the slider in a direction parallel to the zipper chain.
Do not pull the slider to either side or away from the suit.**

This puts a great deal of strain on the teeth and over time could cause the teeth to loosen.

WARNING

**Only pull the slider in a direction parallel to the zipper chain.
Do not pull the slider to either side or away from the suit.**

Ensure that drysuit undergarments and zipper flaps do not interfere with the zipper slider as it is being closed. Grasp the slider loop with your index finger and insert your middle finger between the slider and inner zipper flap or undergarment. This assures that the slider is isolated from the undergarment material and prevents it from getting caught. You will find that donning your drysuit will soon become easy and straightforward. You must always be careful not to put unnecessary stress on the zipper or seals.

CONFIGURATIONS

A. NECK SEALS

The DX300 drysuit is fitted with a Si tech® Quick Neck system with a Silicon seal. The BTR 500 drysuit is fitted with a latex neck seal. These are both trimmable seals.

(See **REPLACING DX300 NECK SEAL** pages 16-19)

WARNING

Never use your fingernails and always use caution when pulling on the neck seal. Do not pull on the thin sealing layer as it might tear with excessive force or become damaged by your fingernails.

CAUTION

It is not necessary or recommended to fold over seals.

You will notice that there are concentric circular raised ridges near the top of the neck seal. This is to adjust the sizing if it is too tight.

Carefully cut off one section at a time with a sharp pair of scissors until the neck seal is still snug, but not uncomfortable.

(See **TRIMMING A NECK SEAL** pages 14-15)

CAUTION

Cutting off too many rings will render the neck seal too big for you, and will leak. The only solution is replacement of the neck seal.

CONFIGURATIONS

B. WRIST SEALS

The DX300 drysuit is fitted with a SI TECH Quick Change Solution Oval Wrist system with a Silicon seal (trimmable seal). The BTR500 drysuit is fitted with a latex bottleneck wrist seal (not a trimmable seal).

(See **REPLACING DX300 WRIST SEAL** pages 21-23)

 **CAUTION**

It is not necessary or recommended to fold over seals.

Coat the inside of your seals with talc. Talc reduces friction and will help with sliding your hand through the seal.

Once the seal is over your hand and positioned on your wrist, remove any folds and wrinkles so that the seal is smooth and lays flat on your wrist with the end of the seal just over the wrist bone.

(See **TRIMMING A WRIST SEAL** pages 14-15)

C. BOOT OPTIONS

The DX300 and BTR500 drysuits are fitted with a 5mm Neoprene socks. Boots are available instead of socks, at an additional cost.

TRIMMING NECK AND WRIST SEALS

DX300 NECK AND WRIST, BTR500 NECK

Trimmable seals may need to be trimmed to enlarge the openings for a proper fit. If you are new to wearing a drysuit with trimmable seals, it may seem uncomfortable when initially worn, but seals should fit snugly. Before diving, test the seals by wearing them for a few minutes to determine the “comfort” factor. The seals should not be too tight. If they cause numbing, tingling, loss of blood flow, or restrict breathing; they need to be trimmed for a larger opening.

CAUTION

Over-trimming of a seal is an easy mistake for someone new to drysuits to make. When trimming the seals be sure to only trim the minimum amount and retest the “comfort” factor before trimming more. Once a seal has been trimmed larger it cannot be made smaller.

If you proceed with caution and follow the “Trimming a Seal” steps below you should be able to get a seal sized properly. But if there is any question about the fit, consult your local authorized Hollis dealer for further guidance (to prevent the delays and expense of replacing an otherwise good seal).

NOTE

Trimming of a seal is a modification of the product and does not constitute a manufacturer’s defect. As such if a seal leaks due to over-trimming it is not covered under the manufacturer’s warranty. If you are unfamiliar with sizing a silicone seal properly, Hollis strongly recommends you seek the assistance of an authorized Hollis drysuit technician. If that is not possible proceed with the directions below on trimming silicone seals.

- Use long / sharp scissors to make clean cuts.
- Cut evenly just above the molding rings (*Fig. 1, A*).

TRIMMING NECK AND WRIST SEALS

DX300 NECK AND WRIST, BTR500 NECK (CONTINUED)

- Use one continuous cut to avoid leaving any jagged edges that could cause a seal to split or tear.
- Only cut one ring from the seal at a time, trying it on after each cut. Take into account that the weight of the suit on the neck seal while worn will affect the feel and fit of the neck seal.
- **REMEMBER** material once removed can not be replaced. Proceed in these steps until the correct fit is achieved.

NOTE

Some divers have an indentation that is formed when flexing the wrist. This indentation may cause a gap in the seal allowing the slight entry of water when the wrist is flexed. Trying to prevent extreme flexing of the wrist may alleviate water entry. A little water will not cause any harm and is no need for alarm. But individuals who have very pronounced tendons may consider using a dry glove system to increase comfort.

WARNING

Extremely tight seals can restrict flow of blood, possibly causing serious injury or death.

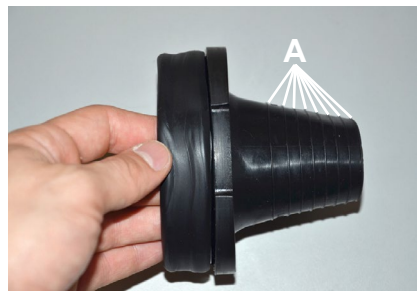


FIG. 1

REPLACING DX300 NECK SEAL

The DX300 at the time of this writing utilizes the Si tech® Quick Neck and QCS Oval wrist systems. These systems allow you to quickly change a torn or damaged seal in the field. Hollis ships the DX300 with silicone seals but the system allows for a variety of compatible seals allowing the diver to choose their favorite.

REMOVING THE NECK SEAL

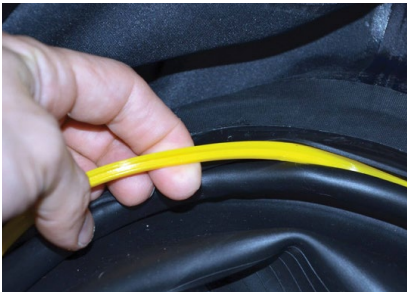
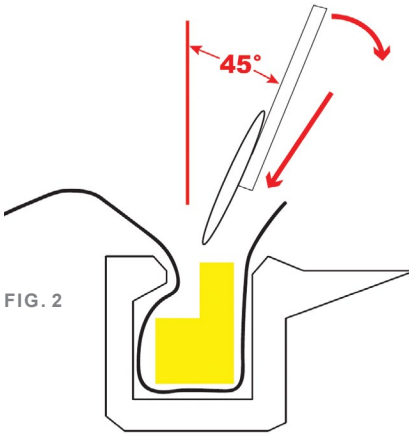
1. From the inside of your suit, press the wheel end of a Quick Neck tool towards the bottom of the inward side of the groove in the neck ring (*Fig. 2, Fig. 3*).
2. Force the groove open by holding the tool at a 45 ° or less angle to the inner diameter lip of the groove, while pressing downward.
3. When the tool has reached the bottom of the groove, lever the yellow lock ring out of its seated position, as shown (*Fig. 4*).
4. When one end is successfully released, you may use your fingers to pull the rest of the retaining ring out of the groove (*Fig. 5*).

 **NOTE**

The yellow lock ring has one side that is narrower. During removal, take note of the yellow lock ring's orientation. It must be reinstalled the same way, with the wider end pressed into the groove.

5. Then simply lift the seal out of the groove if it did not already release with the yellow lock ring.

REPLACING DX300 NECK SEAL



REPLACING DX300 NECK SEAL

INSTALLING THE NECK SEAL

1. Place the yellow lock ring on the inside of the neck seal (*Fig. 6*). Ensure that approximately 1.5 cm of the seal is pulled over the yellow lock ring.

CAUTION

The wider end of the yellow lock ring should be facing the seal material and the Quick Neck groove. Attempting to install the yellow lock ring upside down will prevent proper attachment.

2. Position the seal and lock ring over the groove in the suit's neck ring (*Fig. 7*).
3. Press and roll the Quick Neck tool along the inner track of the yellow lock ring (*Fig. 8*). Ensure the yellow lock ring is completely seated along the full circumference of the neck ring.

NOTE

Use a flat surface while pressing the yellow lock ring into place.

4. Ensure that 1.5 cm of the seal extends past the edge of the neck ring groove (*Fig. 9*).
5. Hold the suit in place with one hand, and do a security check by gently pulling the seal, to check the joint (*Fig. 10*).

WARNING

DO NOT dive the suit without checking that the neck seal is properly sealed and secure.

REPLACING DX300 NECK SEAL

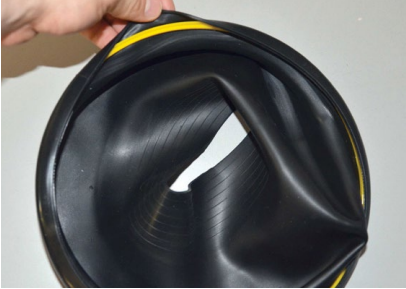


FIG. 6



FIG. 7



FIG. 8

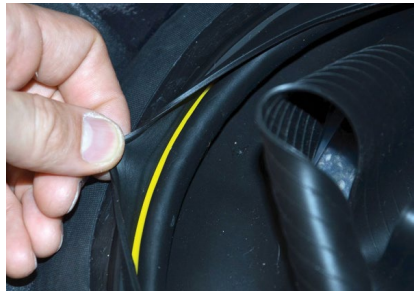


FIG. 9



FIG. 10

REPLACING DX300 WRIST SEAL

REMOVING THE WRIST SEAL

1. Press the PU ring of the suit sleeve up and away from the oval stiff ring (*Fig. 11*).

 **CAUTION**

DO NOT use any tools to pry the sleeve apart, or the seal will likely be damaged.

 **NOTE**

Holding the oval stiff ring against your hip can help you get some helpful leverage to press the cuff off with your thumbs.

2. Roll the end of the seal off of the oval stiff ring (*Fig. 12*).
3. Slide the seal out of the oval stiff ring.



FIG. 11



FIG. 12

REPLACING DX300 WRIST SEAL

INSTALLING THE WRIST SEAL

 **NOTE**

The silicone wrist seals have one side that is shiny and another that has a matte finish. The matte surface seals against your wrist.

1. Insert the seal through the oval stiff ring.
2. Fold the end of the seal over the cuff so the edge of the seal fits into the groove marked A (*Fig. 13*).
3. The seal should now appear as shown (*Fig. 14*).
4. Align and squeeze the stiff oval ring and PU ring together evenly (*Fig. 15*).

 **NOTE**

Install the stiff oval rings so they are in a comfortable orientation to your wrist when worn. This may take a little experimentation to find the ideal position for you and your diving style.

5. Ensure the seal did not slip or become damaged (*Fig. 16*). DO NOT use if the seal slipped during installation or is damaged. Remove, replace, and reinstall as needed.
6. With the seal and stiff oval cuff properly seated all the way, do a security check (*Fig. 17*).
7. Repeat steps 1-6 for the other wrist seal.

 **WARNING**

DO NOT dive the suit without checking that the wrist seal is properly sealed and secure.

REPLACING DX300 WRIST SEAL

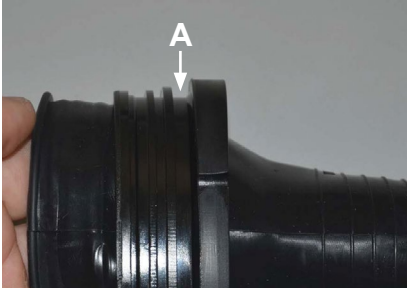


FIG. 13



FIG. 14



FIG. 15



FIG. 16



FIG. 17

CONFIGURATIONS

D. SUSPENDERS

Each suit comes with adjustable suspenders to allow you to wear the suit with the upper half off while on the surface between dives. This can help keep you from getting over-heated. The suspenders will keep the leg portion pulled up; so you can walk freely. It is a good idea to wrap the sleeves around your waist to keep the seals from dragging on the ground while wearing the suit in this manner.

E. CROTCH STRAP

The crotch strap is used to streamline the suit and pull the torso in while diving (*Fig. 18*).

F. DRY ZIPPER

The DX300 drysuit dry zipper allows for donning and doffing the suit, and when fully and properly closed, provides a watertight seal. The dry zipper is a very important part of the suit and must be treated with care. Misuse of the dry zipper may result in permanent damage and necessary replacement (see “Care and Maintenance” section). For additional protection of the dry zipper, a protective Velcro flap is provided, and it should always be closed when the dry zipper is closed (*Fig. 19, shown open*).

G. THIGH POCKETS

The DX300 comes standard with thigh pockets on both right and left legs. The pockets come equipped with a stainless steel D-ring (*Fig. 20, B*) and grommets (*Fig. 20, A*) on the sides for mounting a piece of shock-cord or line that is knotted on both ends. This is so you can clip off accessories with a bolt snap for easy location (in low light) removal, and organization of items. The thigh pockets also have grommets (*Fig. 21, C*) in the bottom to drain water and Velcro strips (*Fig. 21, D*) to streamline the pocket bellows when the pocket is empty.

CONFIGURATIONS



FIG. 18



FIG. 19

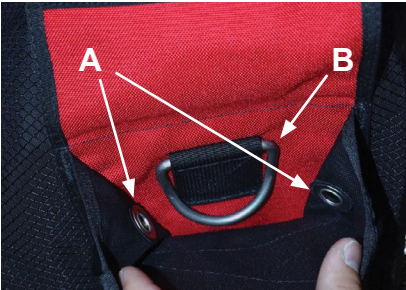


FIG. 20

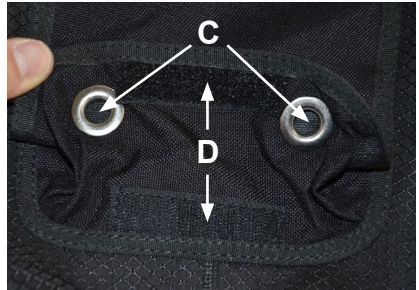


FIG. 21

PRE-DIVE PREPARATION

BEFORE DONNING YOUR DRYSUIT

- Check the silicone or latex neck and wrist seals for proper installation, nicks, cracking or any sign of deterioration.
- Ensure the neck and wrist seals are securely installed.
- You may lubricate the neck and wrist seals with either pure talcum powder or a mild solution of soap (5 parts water to 1 part soap).
- Check that the teeth of the zipper are clear of any debris and that the zipper operates smoothly. DO NOT use excess force when opening and closing it.

 **NOTE**

The plastic teeth of the dry zipper DO NOT require routine lubrication.

 **CAUTION**

NEVER use aerosol lubricants. They may cause damage to the fabric of the suit.

- Inspect the entire suit for any cuts, tears or other damage that would affect the integrity of the suit.
- Check the inflator valve operation by connecting the LP inflator hose to the quick disconnect fitting and depressing the button on the valve.

 **NOTE**

The included LP inflator hose must be installed to the first stage supply regulator according to the regulator's instructions.

PRE-DIVE PREPARATION

BEFORE DONNING YOUR DRYSUIT (CONTINUED)

- Check the adjustable dump valve to make sure it holds and vents air properly.

 **CAUTION**

DO NOT continue inflation if the valve displays any indication of being stuck in the closed position, unable to relieve pressure.

DRYSUIT DONNING AND DOFFING

DONNING INSTRUCTIONS

CAUTION

Refer to the pages in the manual that describe and explain the specific style of neck and wrist seals, or cuff rings and gloves that are specific to your suit. Read and understand the instructions regarding the correct procedures for donning, doffing, care and maintenance of your seal choices before proceeding further.

DANGER

Failing to understand the correct procedure can result in damage to the suit, component failure during the dive, and serious or fatal injury.

Make sure the protective outer zipper cover is open completely and open the main waterproof zipper all the way. Enter the suit through the zipper, one leg at a time. Pull the suit as far up your leg as possible and then repeat with the other leg.

Pull the suit all the way on so that the two halves of the zipper chain rest across your chest in front and your shoulder blades in back.

First put your left arm into the sleeve using your right hand to help lift the zipper chain over your left shoulder. Go slowly and methodically and do not put excessive force on the zipper. You may find it easier to bend your knees slightly while lifting the zipper over your left shoulder.

Push your left hand through the wrist seal while holding the sleeve close to the wrist with your right hand. Once your fingers are through the wrist seal (use the fingers of your right hand) push the seal over your left hand. At this point the neck seal should be directly behind your head.

DRYSUIT DONNING AND DOFFING

DONNING INSTRUCTIONS (CONTINUED)

Now put your right arm (elbow first) through the zipper opening, extend it into the sleeve and bring the zipper over your right shoulder. Once you have positioned the wrist seal make sure the suit is pulled up in the crotch as high as it will go.

Position the zipper so that the upper chain (the one nearest the neck seal) is running across the back of your neck and the lower half, across your chest. The neck seal should be standing straight up behind your head. Bend your head forward and to the right as if you are attempting to touch your chin to your right collarbone.

Bending slightly at the knees, reach over both shoulders and take hold of the upper portion of the zipper so that one hand is on either side of the neck seal. Pull the suit upward and forward at the same time.

When the neck seal is in position over your head, stand up straight and slide the neck seal as far as possible over your head. Using both hands, reach into the top of the neck seal and push it down over your head in a similar fashion as you pushed the wrist seals onto your hands. Position the neck seal and adjust it as you did with the wrist seals. Make sure that your hair and clothing are removed from under the neck seal.

To close the zipper, extend your chest outward and rotate your left shoulder backward slightly. This will help the zipper to lay flat along the length of your torso.

While holding the top of the zipper with your left hand, pull the slider in a downward direction that follows the zipper's natural orientation.

CAUTION

Only pull the slider in a direction parallel to the zipper chain. Do not pull the slider to either side or away from the suit. This puts a great deal of strain on the teeth and over time could cause the teeth to loosen.

PULL THE SLIDER CLOSED SLOWLY. If you feel undue resistance closing the zipper. DO NOT FORCE IT!

continued...



DRYSUIT DONNING AND DOFFING

DONNING INSTRUCTIONS (CONTINUED)

Ensure that drysuit undergarments and zipper flaps do not interfere with the zipper slider as it is being closed.

Grasp the slider loop with your index finger and insert your middle finger between the slider and inner zipper flap or undergarment. This assures that the slider is isolated from the undergarment material and prevents it from getting caught.

You will find that donning your drysuit will soon become easy and straightforward. You must always be careful not to put unnecessary stress on the zipper or seals.

DRYSUIT DONNING AND DOFFING

DOFFING INSTRUCTIONS

Removing a front entry of any kind is similar to removing a pair of coveralls. The first step is to make sure the protective outer zipper cover and waterproof zipper are open all the way.

Unfold the neck seal so that the nylon inner surface is against your neck and rests just under your chin.

Insert your fingers of each hand between the neck seal and your neck on either side of your neck. With your fingers spread, stretch the neck seal outward while pulling upward and bringing your elbows together.

While pulling the neck seal straight up, bend your knees slightly and bend your head forward and out of the seal. At this point the suit will be in the same position as when donning the suit just before you put your head into the neck seal.

Withdraw your arms from the sleeves starting with the right arm. Begin by inserting the fingers of your left hand into the wrist seal of the right sleeve as far as possible.

Withdrawing your hand from the wrist seal is similar to removing the neck seal except only one hand is used to pull off the wrist seal. It is easier to remove the seal if your hand and the seal are dry.

With your fingers inserted into the seal, pull the seal in such a way as to increase its diameter while pulling it off your hand.

Do not try to remove the sleeve completely until the zipper is pushed over your right shoulder. Use your left hand to gently, and without stress to the zipper, push the zipper over your right shoulder.

Now reach behind your back with both arms and pull the right sleeve with your left hand. While pulling on the right sleeve work the suit off of your right shoulder and withdraw your arm from the sleeve. You may need to help the suit over your shoulder with your left hand a few times before you can remove your arm from the sleeve.

Repeat the procedure for removing the left sleeve. Once the suit is down to your knees, the boots can be removed by standing on the heel and withdrawing your legs from the suit one at a time.

Be cautious when doffing not to step on the wrist seals or zipper. Also, try not to let the upper portion of the suit drag on the ground while removing your legs from the suit. Standing on a dry clean mat protects the zipper from debris and keeps your feet dry.



OPERATING THE INLET & EXHAUST VALVES

Both valves have been mounted onto a urethane port, which maintains a watertight seal. This arrangement allows removal of either valve if necessary.

A) INLET VALVE

The orientation of the inlet valve nipple can be rotated 360 degrees to accommodate the orientation of the inflator hose that is configured on your regulator. The inflator hose uses a 3/8" thread to fit your regulator low-pressure port and should be installed by an authorized scuba technician.

Once your suit is zipped up, the seals are properly tucked in and before donning your SCUBA unit, you may want to add some air to the suit to expand it. This allows you to shift your body inside the suit and helps to let the undergarments move into a more comfortable position. Adding some air to your suit at this point can be done by connecting the inflation hose from your scuba unit to the inlet valve on your suit and depressing the button until sufficient amount of air has been added.

Make sure that the quick-connect fittings on valve and hose are cleaned and free of any grit before attempting to connect.

To connect the low pressure supply hose to the inlet valve, slide back the locking slider and push the hose onto the inlet valve connection nipple and release the locking slider. You should hear a click as the slider locks the hose to the valve.

When connecting the inflate hose to the valve nipple, make sure that the hose is secure to the valve. If you pull on the hose without touching the locking slider and it comes free from the valve, it was not connected properly.

Before donning the SCUBA unit, vent any excess air from your drysuit by squatting to force the air to the upper part of the suit and then depress the exhaust valve button.

Note that the inflator hose has been provided with a restrictor in order to limit flow.

Performing this entire pre-dive "ritual" is a habit among experienced drysuit divers because it helps to increase the pre-dive comfort of your suit and is a good way to confirm the valves are functioning properly before entering the water.

OPERATING THE INLET & EXHAUST VALVES

B) EXHAUST VALVE

All Hollis diving drysuits are equipped with an adjustable automatic exhaust valve, which is designed to maintain a constant internal suit volume. If the valve is adjusted fully clockwise, the internal suit pressure will be allowed to reach its maximum before the valve vents. When the exhaust valve is adjusted fully counterclockwise, it will maintain a very slight increase in internal suit pressure and any excess air that is added to the suit will directly pass through the exhaust valve. Understanding the function of the exhaust valve is an important step in learning to use and control your new drysuit.

C) DESCENDING

When you are surface swimming or wanting to maintain positive buoyancy, the exhaust valve should be adjusted fully clockwise. To descend, dump air from your buoyancy compensator and adjust the valve counterclockwise until you feel less buoyant and begin to descend.

You can also manually dump the air from your suit by pushing on the button of the exhaust valve with your free hand. As you descend and the volume of air in your suit begins to decrease, add air by pushing the button of the inlet valve. At this point, you should look at the exhaust valve to see if the air you are adding is escaping. If it is, adjust the exhaust valve clockwise until the bubbles stop flowing. You will very quickly develop the ability to work the exhaust and inlet valves while descending.

CAUTION

Remember: To exhaust air from your drysuit, raise your arm to position the exhaust valve so that it is the highest point on the suit. This allows all of the air in your suit to flow to the exit point.

continued...



OPERATING THE INLET & EXHAUST VALVES

D) ASCENDING

When ascending with the exhaust valve fully open, the exhaust valve will automatically vent air from the suit as the internal suit volume increases. This “hands-free” feature helps you keep your ascent rate relatively constant.

You may find that the air inside your suit can expand during a rapid ascent at a rate that exceeds the maximum “automatic venting” capacity of the exhaust valve. To avoid this situation, slow your ascent rate and manually vent the valve. Manual venting significantly increases the volume of air that the valve exhausts.

Once you reach the surface, adjust the exhaust valve clockwise so that you can maintain positive buoyancy. With a little practice and after a few dives, you will find that using the valves of your drysuit becomes second nature and you will quickly appreciate how comfortable diving in a Hollis drysuit can be.

DRYSUIT CARE & MAINTENANCE

All Hollis drysuits are produced using the highest quality materials with state of the art construction technology. The materials from which your drysuit is made have been developed specifically to withstand the demands of diving and the elements to which diving drysuits are exposed. There are, however, some basic care and maintenance considerations for your drysuit, which will greatly contribute to its life and function. We recommend your drysuit valves be checked annually, by an authorized SCUBA technician, to ensure proper function and performance.

A) ZIPPER CARE

 **WARNING**

Always inspect the zipper for any foreign material that may affect its ability to close and create a watertight seal.

Before each dive lubricate the zipper, follow the instructions on the container of zipper lubricant supplied with your suit.

Open and close the zipper a few times after the lubricant is applied to the zipper chain. The friction caused by the slider traveling over the teeth heats the lubricant causing it to flow into the teeth.

 **WARNING**

Never use aerosol or petroleum based lubricants on your drysuit zipper. These products can adversely affect the zipper and suit materials.

continued...

DRYSUIT CARE & MAINTENANCE

B) AFTER DIVING

Close the zipper and rinse the outside of your drysuit with clean, fresh water. Rinse any of the inner surfaces that may have come in contact with saltwater, such as the neck seal and wrist seals. Make sure that any sand, dirt, or gravel is washed away from the teeth of the zipper.

Open the zipper and hang the suit (if possible) over a piece of plastic pipe. A drysuit hanger can easily be made by passing a rope through a plastic pipe of about 3 to 4 inches in diameter and fastening both ends of the rope to an area where you can leave your suit to dry.

WARNING

Never leave your drysuit in direct sunlight. Ultraviolet radiation from the sun or fluorescent lighting will deteriorate rubber materials (seals) very quickly. Prolonged exposure to direct sunlight will substantially shorten the life of all scuba equipment.

DRYSUIT CARE & MAINTENANCE

C) DRYSUIT STORAGE

The best way to store your drysuit is to leave it on its drying hanger in a cool, dry, dust-free area. If the suit must be stored otherwise; once it is completely dry inside and out, lay it on the floor with the zipper facing downward. Turn the boots inward and loosely rollup the legs and torso to the base of the neck seal. Bring the arms together over the top of the rolled suit so that the open zipper forms an arch as it does while you are wearing the suit. Slide the suit into its carrying bag and store it so that nothing else will be put on top of the bag.

CAUTION

Both Butyl and Butyl Trilaminate materials can be damaged by exposure to petrochemical products such as gasoline/petrol, many industrial solvents, and cleaning solutions containing solvents. Avoid exposure to these chemicals during use of the drysuit and when cleaning.

Should the suit become heavily soiled, or exposed to grease, oil, etc., DO NOT CLEAN THE SUIT WITH SOLVENTS OR SOLVENT BASED CLEANERS OR DEGREASERS. You may use warm water and detergent based soaps to remove the stains. Be sure to rinse all the soap residue out with clean, fresh water. Failure to follow these instructions can result in delamination and degradation of the materials.

DRYSUIT DIVING TIPS & TROUBLESHOOTING

A) “LEAKS” – SOME CAUSES AND CURES

There are many variables that must be investigated when dealing with leaks in a drysuit. Very often a leaking drysuit is not the fault of the suit itself. Usually, but not always, the cause of a leak can be determined when all of the events related to the doffing, donning, and diving with the drysuit are carefully and objectively reviewed.

For example, a diver may discover that her left foot is wet after a dive. The immediate and natural conclusion is that the suit is leaking in the left boot. The suit is checked for a leak in the left boot but no leak is found. The next time the suit is used the diver's left foot stays dry. This is a very common occurrence. What often happens in this situation is that the undergarment, either a sock or an attached underwear bootie is wet prior to putting it into the boot of the drysuit. During the dive the moisture eventually travels through the layers and appears as if it became wet during the dive.

The underwear boot could have become wet from being in contact with a wet piece of equipment during transport, or from stepping on wet ground prior to putting on the drysuit. Another possible cause could be water that entered the suit when it was rinsed after the last dive. Often a leak in a drysuit is clearly visible when the suit is tested, but sometimes other factors that may be determined from objective analysis are the cause.

DRYSUIT DIVING TIPS & TROUBLESHOOTING

B) TROUBLESHOOTING LEAKS

ZIPPER

Problem: Wet arm, shoulder area, and crotch

Possible cause:

- Zipper not totally closed
- Undergarment caught in zipper teeth
- Zipper dirty (grit, lint, sand, salt, etc.) Zipper is worn out, damaged or broken

Other Causes:

- Leaking wrist seal (water is migrating to zipper area)
- Leaking neck seal
- Leaking exhaust valve

Possible Solutions:

- Make sure zipper is completely closed
- Check undergarment for signs of being caught in the zipper
- Make sure the zipper (inner teeth and outer chain) are free from debris and well lubricated
- Check zipper for missing teeth, worn through areas, or if the zipper is broken

SEALS

Problem: Wet arm(s), chest and shoulder area, and crotch

Possible cause:

- Undergarment disrupting the integrity of the seal
- Seals may not be the correct size
- Seals may be torn, split, delaminated from suit or punctured
- Hair under the neck seal
- May be another leak, see rest of troubleshooting

Possible Solutions:

- Review instructions in the “Donning and Doffing” section of this manual
- Replace the seals if they are damaged or stretched far beyond their original size, or have them altered to fit correctly

continued...

DRYSUIT DIVING TIPS & TROUBLESHOOTING

B) TROUBLESHOOTING LEAKS (CONTINUED)

VALVES

Problem: Wet arm(s), chest and shoulder area, and crotch

Possible cause:

- Valve not tightened securely to suit
- Valve port delaminating from the suit
- Valves are dirty or contaminated with lint from underwear
- Internal diaphragm of exhaust valve damaged or displaced
- May be another leak, see rest of troubleshooting

Possible Solutions:

- Tighten the valve to the suit by holding the outer section and turning (clockwise) the inner section
- Re-glue the valve port to the suit or return the suit for service
- Remove the valve from the suit and submerge it completely in warm water and work the valve several times as you would while diving; repeat this procedure under running warm/hot water
- Return the valve for service

Problem: Leaks in Seams or Through Fabric

Possible cause:

- Punctured, torn, worn through
- Seam split or delaminated
- May be another leak, see rest of troubleshooting

Possible Solution:

- Repair damage if possible or, return suit for repair.

DRYSUIT DIVING TIPS & TROUBLESHOOTING

C) CONDENSATION

Condensation can be a significantly misleading factor when investigating suspected leaks in your drysuit.

This occurs frequently with non-insulating drysuit materials such as Trilaminates. The formation of condensation on the inside of the suit is due to the colder exterior temperature.

It is very common for the inside of the suit to be very damp after a dive. You can check the moisture on the inner surface of the suit to see if it is condensation and not moisture from a leak by examining the spread of pattern of the wet areas. If the entire inner surface of the suit is evenly damp, it is most likely due to moisture from condensation. If the dampness is greater in one area when compared to that of another, and your undergarment is also noticeably wet in the same area, then the suit may have a leak.



DRYSUIT INSULATION & UNDERGARMENTS

The most important consideration when selecting an insulating undergarment for use with your drysuit is to maximize the insulation and minimize the bulk. The goal is to avoid adding buoyancy to the drysuit by trapping a large volume of air within the insulating material of the undergarment.

Laminated drysuits must be used with an undergarment that provides sufficient insulation. Drysuits made from laminated materials provide greater undergarment flexibility with changing environmental conditions.

Several fabrics available are very effective insulators and are relatively thin. These materials work well when used in a “layering” fashion. Selecting an appropriate undergarment for the type of drysuit that you have, and using the idea of layering will give you the most adaptable and effective insulating combination. Below are some examples of insulating undergarments offered by Hollis, and guidelines for understanding different combinations of insulating fabrics to help you choose the best undergarment(s) for the various diving environments.

UNDERGARMENT OPTIONS

Hollis offers a variety of layering options. This enables divers to create modular layered systems that allow the assembly of one, two, or more layers to meet the thermal protection requirements over a broad range of water temperature, dive duration and comfort level based on personal metabolism.

When choosing your drysuit layers, remember that each layer consumes some of the available room inside the suit. Make sure the chosen drysuit has enough room to allow freedom of movement even when wearing the thickest combination of undergarments. It is not at all uncommon for a diver to wear a suit size one up from the undergarment size.

For layering options, selection and sizing, please visit www.hollis.com.

DRYSUIT SPARE PARTS

PROD #	PRODUCT NAME
TRR020	Drysuit soft boots (not installed)
TRR105	Standard Latex wrist seals (Bottleneck) Short (Pair)
088919	Latex Neck Seal - Black
THD001	Si Tech Valve Port
THD000	Si Tech Inlet Valve
THD000	Si Tech Exhaust Valve
088961	LP Hose - 80cm length for INT Nipple
088926	Silicone Wrist Seal (Pair)
088928	Silicone Neck Seal



DRYSUIT SIZING (XS - M)

		XS	SM	MD	ML
WEIGHT	LB	120 - 145	135 - 155	150 - 175	170 - 195
	KG	54-66	61-70	68-80	77-89
HEIGHT	IN	63 - 66	66 - 68	67 - 70	69 - 72
	CM	160 - 168	168 - 173	170 - 178	175 - 183
CHEST	IN	32 - 36	34 - 38	37 - 40	38 - 42
	CM	81 - 91	86-96	94-101	96-106
WAIST	IN	26 - 30	28 - 32	30 - 34	32 - 36
	CM	66-76	71-81	76-86	81-91
HIPS	IN	32 - 36	34 - 38	35 - 39	37 - 41
	CM	81-91	86-96	89-99	94-104
INSEAM	IN	26 - 28	27 - 29	28 - 30	29 - 31
	CM	66-71	68-73	71-76	73-79

SOCK SIZING (XS - M)

	XS	SM	MD	ML
US/CA	6-7	6-8	7-9	8-10
UK/AU	5.5-6.5	5.5-7.5	6.5-8.5	7.5-9.5
EU	38 - 39	38 - 41	39 - 43	41 - 44

DRYSUIT SIZING (L - XXL)

		LG	XL	XXL	XXXL
WEIGHT	LB	185 - 210	210 - 240	235 - 265	260 - 295
	KG	84-96	96-109	107-121	117-134
HEIGHT	IN	70 - 73	71 - 74	73 - 76	74 - 78
	CM	178-185	180-188	185-193	188-198
CHEST	IN	40 - 44	42 - 46	44 - 48	46 - 50
	CM	101-112	106-117	112-122	117-127
WAIST	IN	34 - 38	36 - 40	38 - 42	40 - 44
	CM	86-96	91-101	96-106	101-112
HIPS	IN	39 - 43	41 - 45	43 - 47	45 - 49
	CM	99-109	104-114	109-119	114-124
INSEAM	IN	30 - 32	31 - 33	32 - 34	33 - 35
	CM	76-81	79-84	81-86	84-89

SOCK SIZING (L - XXL)

	LG	XL	XXL	XXXL
US/CA	9-11	9-12	11-13	13-15
UK/AU	8.5-10.5	8.5-11.5	10.5-12.5	12.5-14.5
EU	43-45	43-46	45-47	47-49



RECORDS

MODEL

SERIAL NUMBER

DATE OF PURCHASE

HOLLIS DEALER

DEALER PHONE NUMBER

INSPECTIONS & SERVICE

DATE OF SERVICE	SERVICE PERFORMED	DEALER / TECHNICIAN



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