

# VIRGO

User Manual



Photo: Jonas Wall

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**SI TECH** <sup>®</sup>  
INNOVATIVE SAFETY SOLUTIONS – MADE IN SWEDEN

## VIRGO Dry Glove System

We want to congratulate you on your purchase of the VIRGO Dry Glove System developed and manufactured by SI TECH in Sweden. By reading this manual you are only some simple steps away from diving it. VIRGO Dry Glove System is an easy to mount, easy to use Dry Glove System, designed to perform – no matter the diving environment. This complete package include components that will fit your needs undepending the choice of Dry Gloves.



Spanner Rings for a variety of gloves

VIRGO Ring

VIRGO assembly including:  
- Adapter Ring  
- Lock Ring (with rubber grip)  
- O-ring  
(pre-assembled at SI TECH)

### Main Components

Each set consists of eight components per arm:

- Adapter Ring
- Lock Ring
- Rubber Ring
- O-ring
- VIRGO Ring
- Green, blue and yellow Spanner Rings

### Benefits

- Connects with the PU-Ring of QCS Oval.
- User friendly.
- Self supported.
- Accomodating most hands.
- Fits to most common Dry Gloves.
- Sturdy construction.
- Suit Ring: No alignment needed, 360° swiveling connection.
- Lock and Release Ring: made of rubber for maximum grip, protects the O-ring from mud and debris.



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### Important Information

- The different Spanner Rings included in the package allows use of a great variety of gloves. The Spanner Rings are color coded which indicates various thickness. You simply choose the thickness best fitted for your choice of seals and gloves.
- Always dive the VIRGO Dry Glove System with seals installed.

### 1. Fit seal onto VIRGO assembly



**1.1** Mount the seal onto the VIRGO assembly as displayed in this image. Ensure that the flange of the seal ends up in front of the groove closest to the Lock Ring. The image to the right displays how it should look when the seal is in place.

### 2. Mounting VIRGO assembly into drysuit



**2.1** Grab the seal in a firm grip so that it don't slip out of its position while you press the assembly into the PU-Ring on the drysuit. Push the assembly into the PU-Ring until the back-end of the assembly has passed the front end of the PU-Ring.

**2.2** Change grip and continue to press the assembly further into the PU-Ring. Work in a 360° pattern so that you don't put unnecessary stress onto the seal and the PU-Ring.



**2.3** Ensure that the VIRGO assembly aligns with the PU-Ring and the seal similar to this image.

### 3. Detaching the VIRGO assembly



**3.1** Use the Combi Tool to detach the VIRGO assembly from the PU-Ring in your drysuit. Push the lever of the Combi Tool into a groove and pry out the VIRGO assembly.



## 4. Attach glove



**4.1** Start by finding appropriate Spanner Ring. When pressing the Spanner Ring and glove into the Glove Ring they shall slide without use of excessive force. Use green Spanner Ring for thin fabrics, blue for medium fabrics and yellow for thick fabrics.



**4.2** Place the Spanner Ring on the inside of the glove, make sure to find proper position for optimized length of the glove.

**4.3** Fold the glove shaft inwards over the Spanner Ring (latex gloves can be fitted and folded the opposite way).



**4.4** Press the glove with Spanner Ring evenly into the VIRGO Ring.

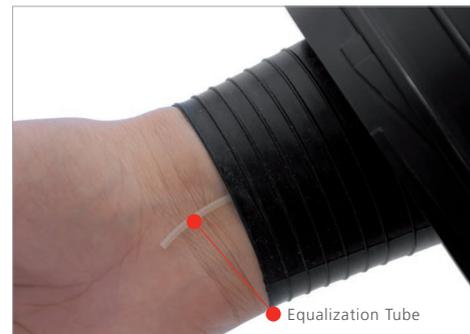
**4.5** Check for creases on the glove as creases may cause leakage.



**4.6** Test the strength of attachment by pulling VIRGO Ring and glove in the opposite direction. If the assembly does not hold together, please change the Spanner Ring to a thicker one.

After you have conducted a testdive you may trim the excess material on the glove shaft for optimized function, comfort and visual appearance.

## 5. Donning



**5.1** Put your hand through the seal and fit the Equalization Tube between seal and wrist. Make sure the Equalization Tube reaches all the way through the seal.



**5.2** Join the rings together (make sure that the O-ring and sealing surface are properly cleaned and lubricated).



**5.3** When the VIRGO Ring and the VIRGO assembly has been joined together just turn the Lock and Release Ring as the image displays. Turn the Lock and Release Ring until it stops. When this procedure has been made properly you should only be able to see part of the edge of the bayonet (as displayed in the right section of the image box).

## 6. Doffing

**6.1** Turn the Lock and Release ring in opposite direction compared to the donning procedure. Turn until the VIRGO Ring and the VIRGO assembly are separated. **Tip!** Keep glove on when doffing second ring. The glove provide a higher friction against the rubber ring.

## *These are suggested instructions only*

Whatever method chosen, be certain the wrist seal, be it latex or silicone, is properly treated. Always make a leakage and stress test on your drysuit seals before diving.

## *Troubleshooting*

- If high resistance occurs, disassemble and lubricate with SI TECH Lube Stick.
- If the rings are misaligned, disassemble and don again.
- Sand and debris caught up by lubricant on VIRGO Ring and/or VIRGO assembly may cause leakage if not removed. Remove O-ring and make sure the O-ring groove and adjoining surface on VIRGO Ring is clean before replacing the O-ring.

**To change or to clean and lubricate the O-ring, follow these simple steps:**

### **Lubrication**



### **IMPORTANT:**

- Lubricate the O-rings.
- Avoid any lubricant on seals.
- Clean by disassemble and rinsing all parts thoroughly in fresh water.
- Dry before assembly.

For best performance; lubricate the surface marked with red. Use SI TECH Lube Stick.

## *Maintenance and Storage*

- After every dive you should check for damage or debris and clean the system with fresh water.
- Before every dive you may do the same check depending on how you store the system.
- The O-ring seal and its groove is especially important to check for dirt.
- Store the rings apart in a debris free environment.



*Our products have  
been trusted by divers  
for more than 40 years*

## *Spare Parts*

Item no.	Item
60523	VIRGO Ring
60528	Adapter Ring
60527	Locking Ring
60526	Rubber Ring
60537	Spanner Ring, green: For thin fabrics
60536	Spanner Ring, blue: For medium fabrics
60535	Spanner Ring, yellow: For thick fabrics
80197	O-ring
60540	Lube Stick
60233	Pressure Equalization Tube
60251	PU-Ring
61025	Silicone seal (standard size)
61026	Silicone seal (small size)



*SI TECH is a Swedish company focusing on manufacturing and marketing of components for protective suits such as; drysuits, rescue suits and garments designed for diverse hostile environments. SI TECH is rooted in the diving industry which is still the company's core market. The company was founded in 1971 by the diving pioneer Stig Insulán.*

### **Core products**

*Modular Quick Change Solutions, Drysuit Valves, Drysuit seals, Dry Glove Systems, Gas Inflation Systems and special components for military purposes*

### **Inhouse capabilities**

*Development and production is made in-house at our facilities in Brastad, Sweden. Inhouse competencies include: CAD construction, Injection Molding, CNC Machining, EMD Machining, Assembly, Sales and Marketing, Logistics and Administration. Our team of engineers, sales and marketing personell have close co-operation with the distributors and end-users of our products.*

