# **LUBRICATION** OF THE ZIPPER

The rubber around the zipper, the area under the zipper's teeth and the zipper itself must be lubricated thoroughly with acid-free paraffin to prevent oxidation.

This paraffin is included in the 'The Universal Testing Device for Immersion Suits'. Please carefully follow the instructions as shown.



Generously spread **TIZIP**<sup>®</sup> lubricant over all rubber parts around the zipper and both under and over it.



Pay extra attention to the rubber tape just under the teeth elements. Use your fingers to apply **TIZIP**<sup>®</sup> lubricant in smooth movements over the entire area.



Open and close the zipper several times to be sure that it can move freely.



When the zipper is closed, spread some extra **TIZIP**<sup>®</sup> lubricant on the teeths elements. Slide in storage bag with open zipper.

Always assure yourself that the zipper has enough lubrication each time you inspect the suit.

# FOLDING AND STORAGE

Folding a suit in the same and correct way before putting it in the storage bag is important to prevent the thickness of the neoprene shell on the folding seams from being unnecessarily reduced. Please carefully follow the instructions as shown.



Put a piece of foam Leave zipper open under the rubber and fasten the buckles of the sole for protection. helicopter belt.



after you have put the left sleeve un-

To prevent mildew

that you store the

suits in a dry en-

viroment below

30°C / 86°F. A good

place to store the

suits in the cabinet

recommend

Roll the legs upward Tuck in the hood two times.



der it.

Put the right sleeve Roll all of this downon top of the flo- ward. tation pillow at the back of the hood.

we

### **STORAGE CONDITIONS**



in the air-conditioned cabin. Slide into storage bag, close and store in a dark and dry place.

# **MONTHLY** SHIPBOARD **INSPECTION**

### Source : IMO/MSC/Circ. 1047

When carrying out the inspection of immersion suits and anti-exposure suits required by SOLAS regulation III/20.7, the following procedure is recommended.

**1.** Check closures on storage bag as well as general condition of bag for ease of removal of suit. Ensure donning instructings are legible. Confirm that suit is the type and size indentified on the bag.

2. Lay the suit on a clean, flat surface. Make sure the suit is dry inside and out. Visually check for damage. Rips, tears or punctures should be repaired in accordance with manufacturer's instructions.

## 3. Check the zipper by sliding it up and down to check for ease of operation. Using lubricant recommended by the manufacturer, lubricate the front and back of the zipper and the slide fastener. If the zipper is not functional, the suit should be removed from service and discarted or returned to the manufacturer or a suitable repair station.

4. If fitted, check inflatable head support and/or buoyancy ring for damage and ensure that it is properly attached. Check inflation hose(s) for deterioration. At least quarterly, the head support/buoyancy ring should be inflated and tested for leaks (this test does not apply to

5. Check retro reflective tape for condition and adhesive. Replace if necessary.

7. Replace suits in the bag with zippers fully opened.

8. The opportunity should be taken at such monthly inspections for the crew to practice donning the immersion suits or anti-exposure suits.

# **PERIODIC** (SHIPBOARD) TESTING

### Source: IMO/MSC/Circ. 1114

intervals:

integral inflatable lifejackets). Leaks should be repaired in accordance with manufacturer's instructions.

6. If fitted, check whistle and expiration date of light and battery.

Guidelines for periodic testing of immersion suit and anti-exposure suit seams and closures. To ensure the maintenace of adequate strength and watertightness of seams and closures of immersion suits and anti-exposure suits with age, it is recommended that each suit be subjected to an air pressure test at the following

- Every 30 months (21/2 years) for suits of less than 10 years of age - Every 12 months (1 year) for suits of 10 years of age and over

repairs to a suit be carried out by a facility which has access to the manufacturer's recommended servicing instructions, parts and adhesives, and suitable trained personnel.

The air pressure test may be carried out on board ship if suitable equipment is available.

Easy shipboard testing of the strength and watertightness of seams and closures can be carried out with 'The Universal Testing Device for Immersion Suits', all in accordance with IMO/SOLAS.

The suitcase includes 'Super Repair' with manufacturer's (Scandia) instructions for onboard repair and re-water-proofing.

Testing Device for immersion suits. See also: www.scandiagear.com

#### Please note:

Calibrate the pressure gauge yearly at the local service station.

While the product lifetime of an immersion suit can be extended through proper care and maintenance, immersion suits should be replaced after 20 years in use.

It is strongly recommended that any

# UNIVERSAL TESTING DEVICE FOR IMMERSION SUITS



















### Connecting Instructions

- 1. Get the stable board with the screw thread
- 2. Get the neoprene gasket and put it on the stable board
- 3. Put the stable board in the main opening. Take care that the neoprene fabric of the head does not fold in two, otherwise it will not form a sufficient seal
- 4. Close zipper tightly, all the way to the top. Take care that the puller of the zipper faces down
- Close neck flap
- 6. Attach the pressing board with the groove facing downwards. Ensure that the zipper fits correctly in the groove of the pressing board
- 7. Put the metal closing rings and fasten the lock nuts tightly
- 8. Attach the pressure gauge by means of the guick (dis)connector
- 9. Attach the connecting hose, which is already attached to the air compressor with maximum supply pressure of 10 bar
- 10. Start the airflow by turning the handle towards the connecting hose
- 11. Fill the entire suit carefully with air to a maximum pressure of 1.4 kPa
- 12. Turn the handle of the connection hose to the closed position to avoid damage of the suit and the escape of any air

- 13. Fill a bucket with lukewarm water, add some mild dish washing detergent and create a light foam. Dip a sponge into the water and move the sponge along the seams.
- 14. If the air pressure drops under 0.7 kPa, use the air compressor to add additional air
- 15. In case any air bubbles appear on the seams, follow the instructions in the manual enclosed in 'Universal Maintenance & Repair Kit for Immersion Suits'.

### **Disconnecting Instructions**







- 1. Remove the pressure from the air compressor and, after inspection, disconnect the connecting hose from the pressing board
- 2. Remove the pressure gauge by means of the quick (dis)connector
- 3. Unscrew the locknuts and remove metal closing rings

- 4. Remove the pressing board
- 5. Open neck and remove the stable board
- 6. Mark the result on the back of the suit by means of the waterproof marker. Let the suit thoroughly dry to avoid mildew



- 1. 2 spare rings
- 2. Pressure Gauge
- 3. 2 clips for emergency lights
- 4. Pressing board incl. stable board, neoprene gasket, 2 locknuts and 2 rings
- 5. Universal Maintenance and Repair kit
- 6. 2 whistles
- 7. Connection hose
- 8. 2 spare locknuts
- 9. Waterproof marker
- 10. Neoprene gasket
- 11. 2 emergency lights

#### Manufacturer:

SCANDIA GEAR EUROPE B.V. ◊ Lorentzweg 31, 3208 LJ Spijkenisse, The Netherlands ☑ info@scandiagear.com ⊗ www.scandiagear.com

### Disclaimer

Scandia Gear is not liable for damages that result from the improper use of these products.







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ROTTERDAM SINGAPORE HOUSTON DUBA

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Lubrication of the zipper Folding and storage Monthly shipboard inspection Periodic (shipboard) testing Universal Testing Device for Immersion Suits

# MAINTENANCE

**IMMERSION SUITS** 

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