

SERVICE MANUAL FOR VIKING IMMERSION SUITS				
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SERVICE MANUAL for VIKING Immersion Suits

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INTRODUCTION

Service inspection of VIKING immersion suits is to be carried out only by servicing stations authorised by VIKING LIFE-SAVING EQUIPMENT A/S.

The purpose of this service manual is to ensure that the suit is serviced and repaired in such a way that it is in order and functional.

If any doubts should occur in connection with the servicing of suits, please contact the service manager of VIKING LIFE-SAVING EQUIPMENT A/S.

Where modifications of existing VIKING immersion suits are to be implemented, the modification instructions will be inserted in Section 12 of the service manual.

Where information relative to existing VIKING immersion suits is given, the information will be introduced in Section 13 of the service manual.

RESTRICTIONS ON REPAIRS

VIKING recommends that the suits be sent to Esbjerg, Denmark, for replacement of collars and front zippers.

A SEAM-SEALING MACHINE IS REQUIRED FOR THE SERVICING STATION TO REPLACE FRONT ZIPPERS, SEWED IN CUFFS AND COLLARS.

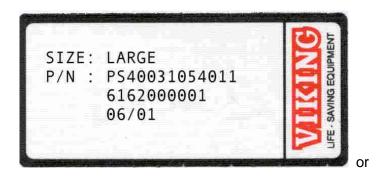


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2 IDENTIFICATION AND MARKING

All suits are reverse the suit provided with an identification mark. The identification mark contains information of article No., size and suit No. and date of production.

Example:

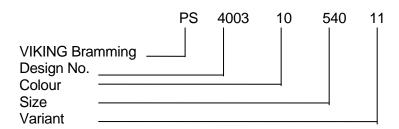




It is important to know the article number in order to identify the correct spare parts and repair methods.

Article numbers are created as stated below

Article No.:





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3. SERVICE INSPECTION

3.1 SERVICE INTERVAL

Immersion suit should be inspected at suitable intervals.
VIKING LIFE-SAVING EQUIPMENT A/S recommend following intervals:

- Suits used regularly should be inspected annually.
- Aribbononment suit should be inspected at least every 3rd. year.

Beware of national authorities may have special requirements.

3.2 INSPECTION OF SUITS

The suits are to be inspected in accordance with the applicable points below. (Please notice inspection form is available in section 11)

- 1. Leakage test.
- 2. Check the outer material for holes and tears.
- 3. Check pockets.
- 4. Check boots for defects, tears and holes.
- 5. Check socks.
- 6. Check rubber wrist seals for cracks and scratches; check glueing, ribbons and mounting.
- 7. Check collar/hood for cracks and scratches; check glueing, ribbons and mounting.
- 8. Check gloves for cracks; check GLUEING and mounting.
- 9. Check reflective tape for mounting and condition.
- 10. Check front zipper and grease it with the grease stick.
- 11. Check lifting Becket.
- 12. Check bodyline.
- 13. Check buoyancy foam for condition.
- 14. Check miscellaneous, like webbing and buckle.
- 15. Check light function and expire date.
- 16. Check whistle.
- 17. Check the knife
- 18. Check the lining notice the zipper for mounting.
- 19. Check labelling.



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WASHING INSTRUCTIONS

4.1 LINING

Dismount buoyancy foam from Inner lining.

Wash the inner lining at 40°C.

An ordinary detergent without bleaching preparation may be used, but the following is recommended:

Main wash: 1 part of Tensid Part No. 705-0017 / new 1013167

1 part of Alkali Part No. 705-0016 / new 1013166

Softener: 1 part of Skyl Part No. 705-0019 / new 1013182

The mentioned detergent necessitate a washing machine with automatic dispenser.

The inner liner must only be spin-dried by low speed.

The inner liner must only be tumble-dried by low temperature.











When the inner lining is dry, mount the buoyancy.

4.2 SUITS WITHOUT INNER LINING OR DETACHABLE LINER.

(Wash the inner lining as 4.1)

Dismount all loose parts such as gloves, hood, light, whistle, knife etc.

Wash the suits at 40°C.

An ordinary detergent without bleaching preparation may be used, but the following is recommended:

Prewash: 1 part of Tensid Part No. 705-0017 / new 1013167

1 part of Alkali Part No. 705-0016 / new 1013166

Main wash: 1 part of Tensid Part No. 705-0017 / new 1013167

1 part of Alkali Part No. 705-0016 / new 1013166 1 part of Triplex plus Part No. 705-0015 / new 1013163

The mentioned detergents necessitate a washing machine with automatic dispenser.

The suits are not to be spin-dried.

The suits are not to be tumble-dried.













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4.3 IMMERSION SUITS WITH ATTACHED LINER (DESIGN 5002, 5003, 5004)

Dismount all loose parts such as buoyancy foam from Inner lining, light, whistle etc.

Wash the suits at 40°C.

An ordinary detergent without bleaching preparation may be used, but the following is recommended:

Main wash: 1 part of Tensid Part No. 705-0017 / new 1013167

1 part of Alkali Part No. 705-0016 / new 1013166

The mentioned detergent necessitates a washing machine with automatic dispenser.



When the suit is dry, mount the buoyancy foam in inner lining.



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5.1 CONDEMNATION RULES

A suit must be condemned if it is deemed that repair will not make the suit fully functional or that the expenses in connection with the repair will be too high. (Ordinarily 50% of purchase price) - Contact the customer, if necessary.

If the customer wants to have the condemned suit returned, clearly mark the suit with label 1003396 "Discarded for life-saving" welded reverse the suit and mount the label 1003591 "Discarded" on front zipper.

If the customer does not wish to have the condemned suit returned, cut up the suit with scissors.



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5.2. RULES FOR EXPIRY DATE ON LIGHT

Expire date on light must be checked in connection with servicing of Immersion Suits.

- SOLAS approved Immersion suits At the time of servicing the light must have a lifetime of min. 5 months.
- SOLAS approved Immersion suits, If the SOLAS suit is vacuum packed the light must have a lifetime of minimum 3 years
 - Next servicing and replacement of light, has to follow the next service date.
- Not approved SOLAS Immersion suits the light must have a lifetime of minimum 1 year.



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6 LEAKAGE TEST OF SUITS

LEAKAGE TEST WITH COMPRESSED AIR.

Suits are to be tested with compressed air.

Suits with reinforcement on the outside are to be tested reverse out.

The detection of leakage can either be with soapy water solution or immersion of the whole suit in a water vessel.

Soapy water solution:

- Mount the sealing clamps 1011092 at wrists seals
- Mount the sealing tool 1002802 in face opening.
- Connect the inflation station and inflate the suit to a pressure of 20 mbar ±1.
- Cover the whole suit with soapy water solution (1/3 detergent for dish wash without perfume and 2/3 water) with a sponge 1011091.
- The suit is to be tested on each side.
- Mark any leakage with a special pen, 1018471 (mark leakage in a FORM FOR MARKING OF LEAKING, page 11.1)
- Rinse the suit with clear water
- Dry the suit

Water vessel

- Mount the sealing clamps 1011092 at wrists seals
- Mount the sealing tool 1002802 in face opening.
- Place the suit in the vessel and close the lattice cover.
- Connect the inflation station and inflate the suit to a pressure of 20 mbar +1.
- Inspect the suit on front side
- Turn the suit and inspect the rear side.
- Mark any leakage with a special pen, 1018471 (mark leakage in a FORM FOR MARKING OF LEAKING, page 11.1)
- Dry the suit

TEST WITH WATER PRESSURE.

Suits made from Gore-Tex and neoprene coated nylon are to be tested with water pressure in a special test bench. All tests are to be done with the reverse out of the suit.

- Mount the sealing clamps at the neck seal.
- Mount the connectors at the wrist seals.
- Close the lattice.
- Place the lattice in the tilted position and start the pump,
- Adjust the pressure to 25 mbar ±1.
- Inspect the suit on both sides and mark any leakage with a special pen, No. 1018471.

Type of fabric	Pressure
Gore-tex	25-30 mbar <u>+</u> 1
PU coated nylon	20 mbar <u>+</u> 1
Neoprene coated nylon	20 mbar <u>+</u> 1
Neoprene	20 mbar <u>+</u> 1



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7. LIST OF TOOLS AND EQUIPMENT

DESCRIPTION	DARTNO
DESCRIPTION 72 WCT	PART NO.
TEST BENCH type 73 WST.	1017956
CROSSOVER	1001581
WRIST SEAL RINGS	1000040
	4177 1018634
SHIELD FOR COLLAR MOUNTING	1003247
	4003-12 1017952
SHIELD RING FOR COLLAR MOUNTING PS	4003-12 1017953
FABRIC CLAMP	1001674
FOLDING STICK 20 CM	1000450
STITCH UNPICKER	1001661
SCISSORS	1001659
BALLOON FOR WRIST SEAL MOUNTING	1014606
BALLOON FOR BOOT MOUNTING	1014605
BALLOON FOR MOUNTING OF GLOVES	1012468
HEATING GUN	1017954
INDUSTRIAL WASHING MACHINE	1017955
SEWING MACHINE	
PUNCH PLIERS	
PIPE WRENCH	
STEEL HAND ROLLER, 10 MM	1004963
TOOL SET FOR IMMERSION SUIT	1011089
Containing:	
Sealing tool for face opening	1002802
Sealing clamp for wrist	1011092
Inflation unit for immersion suit Balloon for wrist seal mounting	1011090
Balloon for boot mounting	1014606
Sponge for soapy water	1014605 1011091
Marking pen Edding 950, no. 49, white	1011091
Folding stick 20 cm	1000450
Ring/fork wrench 9/16"	1006535
SEALING TOOL FOR FACE OPENING	1002802
INFLATION UNIT FOR IMMERSION SUIT	1011090
SEALING CLAMP FOR WRIST	1011092
MARKING PEN	1018471
CDONCE	
SPONGE	1011091



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8 STANDARD FOR GLUE MIXING

- 1. Glue and hardener is acclimatized for 12 hours before use.
- 2. Glue marked with an*, according to list below, must be shaken before use.

 Must be applied a maximum 72 hours after the glue has been shaken.
- The "Expiry-date" which must appear from the packaging, must not be exceeded.
 Any extension of the expiry date Quality Department in Viking DK must be contacted.
- 4. Following solvents do not require expiry-date printed on the package:

1012436 MEK, BB thinner 694 1005112 Heptane solvent

5. Glue must be mixed according to the following:

*1013243 Bostik NE 486 7 – 9 % 1001918 hardener 2206

1001642 Fast Bond 30: No hardener

*1012545 GXGQ: 7 – 9 % 1001918 hardener 2206 1032514 Bostik Vinycol 1520 5% 1024195 hardener Desmodur

The amount of hardener is calculated as a percentage of the weight. The weighing must be done on a calibrated scale.

Mixed glue has a pot-life of max. 3 hours

NOTE

MIXED GLUES ARE TO BE STORED COVERED
DO NOT USE THE SAME BRUSH OR TOOLS IN DIFFERENT KINDS OF GLUE
VESSELS AND TOOLS ARE TO BE CLEANED OF DIRT/RESIDUE
THE WORKPLACE IS TO BE KEPT CLEAR AND TIDY



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8 STANDARD FOR GLUEING WITH CONTACT GLUE

This standard does **NOT** apply to the GLUEING of neoprene (gloves, hood etc.)

- 1. Work instructions must be present before the operation.
- 2 Glue has to be applied in a uniform layer and the given opening and stand until opening time has been reached (the glue is a bit sticky)
 - If glue has to be applied twice, the second layer can be applied in the opening time or at later time.
- 3. The glued surfaces cannot be touched and brush hair or other impurities are not to be found on the surface either. Otherwise leakage could occur. (However, opening time must be controlled)
- 4. The materials are assembled and knuckled together with the knuckle stick or rolled with "the roller".
- 5. Outside the glued parts, there must be a visible edge of approx. 1-5mm, except where it is glued all the way out to the edge.
- 6. Activating of glue with a moisten cotton rag with toluene, not fluid and dripping. The glue surface must be moistened by dabbing.



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On the following pages the repair instructions are described for each design number.

Using the table below the repair instruction used for the specific design numbers is identified.



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Design No.	1		2	3	4	5	6	7	8	9	10	11	12
PS3764	14		3								2		1
PS4001	14		2	7	1			-			1		
PS4002	14		2		1	ı	ı		-	1	1		
PS4003.10	11		2	18	ı	3	1	ı	-	ı	1	ı	1
PS4003	14	14	2	18	1		1	-	-	-	1		1
PS4004	14	14	2	7	1			-	-	-	1	-	-
PS4005	19		2	7	1						1		1
PS4006	1		2	-	-	3	-	-	-	-	1	-	1
PS4010	1		2	12	1	-	-		-	-	1	1	-
PS4010.10	1		2	12	1	1	-		-	-	1	1	-
PS4013	11		2	26	1		1	-	-	-	1	-	1
PS4014	14		2	7	1	-	-		-	-	1	-	-
PS4017	14		2	7	1	-		-	-	-	1		
PS4018	1		2	5	1	-	-		-	-	1	-	-
PS4019	14		2	7	1	-	-		-	-	1	-	-
PS4020	14		2	7	1	-	-		-	-	1	-	-
PS4021	11		2	6	-	1	-	-	-	-	1	-	1
PS4022													
PS4026	1		2	4	1						1	1	1
PS4026.10	1		2	4							1	1	1
PS4027	1		2	3	-	1	-		-	-	1	1	-
PS4027.10	1		2	3	-	1	-		-	-	1	1	-
PS4027.11	1		2	3	-	1	-		-	-	1	1	-
PS4027.12	1		2	4	-	1	-		-	-	1	1	-
PS4027.13	1		2	3	1	-	-		-	-	1	1	-



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	Replacement of wrist seals (gluing)	Replacement of wrist seals (sewing)	Replacement of tape	Replacement of collar	Replacement of socks	Replacement of boots	Replacement of front zipper	Replacement of PU front zipper	Replacement of hood	Replacement of gloves	Repair of tears and holes	Intake of collar	Replacement of reflective tape
Design No.	1		2	3	4	5	6	7	8	9	10	11	12
PS4029	1		2	5	-	1	-	-	-	-	1	1	-
PS4029.11	1		2	1	-	1	-	-	-	-	1	1	-
PS4030	1		2	1	-	-	-		-	-	1	1	-
PS4031.10	10		2	1	-	8	-	-	-	-	1	1	-
PS4032	14		2	7	1	-	-		-	-	1	-	-
PS4033	14		2	7	1	-	-		-	-	1	-	-
PS4034	1		2	1	-	1	-	-	-	-	1	1	-
PS4035		4	2	26	1	-	-	-	-	-	1	-	
PS4037	10		2	3	-	8	-		-	-	1	1	1
PS4061	1		2	-	-	-	-	-	-	-	1	-	-
PS4070	4		2	-	1	-			-	-	1	1	-
PS4072.10	1		2	23	1	-	2		-	-	1	-	-
PS4077	1		2	-	1	-	-	-	-	-	1	-	-
PS4103		14	2	6	1	-	-	-	-	-	1	-	1
PS4110		9	2	-	-	4	-	-		-	1	-	1
PS4130	9	9	2	5	1	3					1	-	
PS4162	14		2	-	-	3	-		-	-	1	-	-
PS4162.10	1		2	-	-	3	-		-	-	1	-	1
PS4163.10	1		2	27	-	7	-		-	-	1	1	1
PS4163.11	10		2	27	-	2	-		-	-	1	1	1
PS4164	2		2	24	-	2					1	-	1
PS4167	17		2	24	-	2	-	-		-	1	-	1
PS4172	9	9	2	5/21		4						1	-
PS4177	4	4	2	26	1	-	-	-	-	-	1	-	-
PS5004	3		3	-	-	5	-	1	-	-	2	-	1
PS5004.10	3		3	-	-	5	-	1	-	-	2	-	1
PS5005	-		3	-	-	5	-	1	-	1	2	-	1



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	Replacement of wrist seals (gluing)	Replacement of wrist seals (sewing)	Replacement of tape	Replacement of collar	Replacement of socks	Replacement of boots	Replacement of front zipper	Replacement of PU front zipper	Replacement of hood	Replacement of gloves	Repair of tears and holes	Intake of collar	Replacement of reflective tape
Design No.	1		2	3	4	5	6	7	8	9	10	11	12
PS5008	5		1	21	-	2 or 4	4		-	-	3	1	1
PS5008.10	5		1	21	-	2 or 4	4		-	-	3	1	1
PS5008.11	5		1	21	-	4	4	-	-	-	3	1	1
PS5010	9	9	1	-	-	4	-		1	-	3	-	1
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PS5014	5		1	21	-	4	-		-	-	3	1	1
PS5015	5		1	21	-	4	-		-	-	3	1	1
PS5028	5		1	24		4					3		1
PS5030	6		1	4	-	6	-		-	-	3	1	-
PS5030.10	6		1	4	2		-		-	-	3	1	-
PS5030.11	8		1	4	-	6	-		-	-	3	1	-
PS5044	5		1	25	2		3				3		1
PS5060	8 or 15		1	7	-	6	-		-	ı	3	ı	-
PS5060.10	8		1	7	-	6	-		-	-	3	-	-
PS5063	13		3	-	-	-	-		-	-	2	-	1
PS5065	7		3	-	-	-	-		-	-	2	-	1
PS5065.10	7		3	-	-	-	-		-	-	2	-	1
PS5076.10			1	-	-	-	-		-	-	2	1	1



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1 Replacement of sleeve wrist seal.

Replacement of Codan wrist seals, 1014953 on Gore-tex immersion suits without zip fastener for inner lining.

C = clean	G = glue	X = number	H = harde	ner
Glue mixture according to VIKING norm 8.1. Glueing is carried out according to VIKING norm 8.2.				
Overlap 3-4 cm The lap joint must be Disassemble balloor	e at front sleeve seam. า.			
Gore-tex fac Wrist seal fac Indian tape 1		per glue).	C C	1xG 1xG 1xG
	nd provided with a ballo the extent that the wr	on. st seal becomes wider		
Gore-tex reve Wrist seal rev Indian tape 1	/erse		С	1xG 2xG 1xG
	erse / wrist seal face sid averted over the sleeve			1xG
with ring. Edge of sleeve in the	cleaned and put on the	·	С	
removed using a fold is heated on Crosso stick. The seam bet		s reverse. Internal ribbon emoved using a folding seal is heated on	Heptane 1005112	Bestik NE 486 1013243 +7-9% hardener 1001918



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2 Replacement of sleeve wrist seal.

Replacement of Dipco wrist seals article no. 1003710 on immersion suits made of Neoprene coated Nylon.

			Heptane 1005112	Bestik NE 486 1013243 +7-9% hardener 1001918
External ribbon is heated or removed using a folding stiribbon is heated on Crosson a folding stick. The seam between sleeve Crossover for 5-10 sec. and	ck. The sleeve ver for 5-10 sea and wrist seal i	is reverse. Internal c. and removed using s heated on		
The sleeve is reversed and	provided with	ring.		
The Dipco wrist seal 10037	'10 is grind and	I cleaned.	С	
Put on the wrist seal ring re	everse out. 11/2	cm is tucked in.		
GLUEING: Neoprene reverse/w Wrist seal is averted over the		ide		1xG
Neoprene reverse Wrist seal reverse Neoprene tape 100°	1312		С	1xG 1xG 1xG
The suit is turned and prov NB - Do not inflate to the ex Than the sleeve.				
Neoprene face side Wrist seal face side Neoprene tape 100°			С	1xG 1xG 1xG
Overlap 3-4 cm The lap joint must be at fro Disassemble balloon.	nt sleeve seam			
Glue mixture according to Glueing is carried out acco				
C = clean	G = glue	X = number	H = harden	er



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3 Replacement of sleeve wrist seal.

Replacement of Codan wrist seals no. 1014953 for immersion suits made of PU coated nylon.

Cut off the wrist seal, 5 cm from edge of outer fabric. Sew on (part 1008151) lengthen the sleeve and tape the sewin in cross-over. Tape no. 1003570.	Heptane 1005112	MEK 1012436	Bostik NE486 1013243 + 7-9% Hardener 1001918
Be careful not to destroy the inner lining.			
Unstitch wrist seal from inner lining.			
Sew on a new wrist seal to the inner lining with a seam width of 10 mm.	of		
Fold the edge of the sleeve 2½ - 3 cm. Place the edge of the wrist seal so that it follows the fold of the sleeve all the wat around. The seam of the outer fabric and the inner lining is to be in the same place.	У		
Insert balloon in the sleeve and inflate it.			
Clean and glue the wrist seal. Clean and glue the reverse of the sleeve		C C	2xG 1xG
Force the fold over the wrist seal so the edge of the sleeve 1½ - 2 cm over the seam of the wrist seal and roll or knuckle it.	s		
Clean and glue the Neoprene ribbon 25 mm, 1001313	С		2xG
Mount Neoprene ribbon at assembling at reverse side. Overlap 3-4 cm and knuckle it.			
The balloon shall remain in the sleeve for at least 16 hours.			
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2			
C = clean $G = glue$ $X = time$	H = hard	dener	



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4 Replacement of sleeve wrist seal.

Replacement of Neoprene wrist seals on Gore-tex immersion suits without zipper for inner lining.

Heat up external ribbon with heat gun and pull it off with a folding stick. Turn the reverse of the sleeve out. Heat up internal ribbon with a heat gun and pull it off with a folding stick. Heat up the joint between sleeve and wrist seal with a heat gun and separate it with a folding stick. Or dismantle the stitching or cut by the stitching. REPLACEMENT OF WRIST SEAL BY GLUING Turn the reverse of the sleeve out. Cut the edge straight and insert rings in the suit. Edge of sleeve along edge of ring. Wrist seal (is pre glued). GLUEING: Gore-tex reverse Wrist seal on sleeve such that the sleeve seam places the sewed-on elastic Remember an overlap of 1½ cm. Press down the neoprene edge. Mount ribbon internally. Gore-tex reverse Wrist seal reverse Wrist seal reverse Neoprene ribbon 1001312 Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse Gore-tex face side Bostik NE 486 10132: 4 + 25% Heptane 1005112 Bostik NE 486 101324 + 25% Heptane 1005112 TxG Hount ribbon insert of loos in seal on sleet go cut by the stitching or	13
separate it with a folding stick. Or dismantle the stitching or cut by the stitching. REPLACEMENT OF WRIST SEAL BY GLUING Turn the reverse of the sleeve out. Cut the edge straight and insert rings in the suit. Edge of sleeve along edge of ring. Wrist seal (is pre glued). GLUEING: Gore-tex reverse Wrist seal face side Mount wrist seal on sleeve such that the sleeve seam places the sewed-on elastic Remember an overlap of 1½ cm. Press down the neoprene edge. Mount ribbon internally. Gore-tex reverse Wrist seal reverse Neoprene ribbon 1001312 Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse	,
Turn the reverse of the sleeve out. Cut the edge straight and insert rings in the suit. Edge of sleeve along edge of ring. Wrist seal (is pre glued). GLUEING: Gore-tex reverse Wrist seal face side Mount wrist seal on sleeve such that the sleeve seam places the sewed-on elastic Remember an overlap of 1½ cm. Press down the neoprene edge. Mount ribbon internally. Gore-tex reverse Wrist seal reverse Neoprene ribbon 1001312 Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse	-
GLUEING: Gore-tex reverse Wrist seal face side Mount wrist seal on sleeve such that the sleeve seam places the sewed-on elastic Remember an overlap of 1½ cm. Press down the neoprene edge. Mount ribbon internally. Gore-tex reverse Wrist seal reverse Neoprene ribbon 1001312 Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse	
Wrist seal face side Mount wrist seal on sleeve such that the sleeve seam places the sewed-on elastic Remember an overlap of 1½ cm. Press down the neoprene edge. Mount ribbon internally. Gore-tex reverse Wrist seal reverse Neoprene ribbon 1001312 Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse	
sewed-on elastic Remember an overlap of 1½ cm. Press down the neoprene edge. Mount ribbon internally. Gore-tex reverse Wrist seal reverse Neoprene ribbon 1001312 Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse	
Gore-tex reverse Wrist seal reverse Neoprene ribbon 1001312 Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse	
Gore-tex reverse Wrist seal reverse Neoprene ribbon 1001312 Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse	
Neoprene ribbon 1001312 Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse	
Overlap 3-4 cm. Turn sleeve and insert balloon. Mount ribbon reverse	
Mount ribbon reverse	
Gore-tex face side	
Wrist seal face side 1xG Neoprene ribbon 1001312 C 1xG	
Overlap 3-4 cm. Assembling at front of sleeve seam and knuckle it.	
REPLACEMENT OF WRIST SEAL BY SEWING	
Turn reverse out of the sleeve. Cut the edge straight	
Clean and glue reverse sleeve edge	
Put the wrist seal in the sleeve – right side vs. right side – and sew it approximately 3 mm from the edge.	
Glue the sleeve and wrist seal reverse	
Clean and glue neoprene ribbon 25 mm, 1001313	
Mount neoprene ribbon at assembling at reverse side of sleeve and wrist	
Overlap 3-4 cm and knuckle it.	
Carry out glueing according to VIKING standard 8.1	
Glue mixture according to VIKING standard 8.2	
C = clean $G = glue$ $X = number$ $H = hardener$	



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5 Replacement of sleeve wrist seal.

Replacement of Neoprene wrist seals S-450012450xxL/S-450012450xxR and S-450016250xxL/S-450016250xxR with zip and elastic for immersion suits made of Neoprene coated Nylon, with inner lining.

	Heptane 1005112	Bostik NE486 1013243 + 7-9% Hardener 1001918
Heat up external ribbon with a heat gun and removed using a folding stick. The sleeve is reverse. Heat up the wrist seal with a heat gun and removed using a folding stick.		
Turn reverse out of the sleeve. Cut the edge straight and insert rings in the suit. Edge of sleeve along edge of ring. Wrist seal S-45001245050L / S-45001245050R sizes XS-S Wrist seal S-45001245058L / S-45001245058R sizes M-L-XL-XXL-XPL		
Clean and glue reverse sleeve edge Glue wrist seal face side	С	1xG 1xG
Mount wrist seal on sleeve such that the wrist seal zipper is placed by the sleeve seam Notice, wrist seal right - sleeve right / wrist seal left - sleeve left.		
Overlap of 2 cm. Press down the edge.		
Fold the wrist seal edge over the ring, such that the seam is to be covered. Knuckle the Neoprene edge.		
Remove the ring and turn the sleeve at face side.		
Insert balloon in sleeve.		
Neoprene ribbon 1001312 Glue face side sleeve/wrist seal	С	1xG 1xG
Mount Neoprene ribbon at assembling at external sleeve and wrist seal. Assembling at front sleeve seam. Overlap 3 - 4 cm.		
Disassemble balloon.		
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue$ $X = number$ $H = hardener$		



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6 Replacement of sleeve wrist seal.

Replacement of Codan rubber wrist seals 1014953 for immersion suits made of Neoprene coated nylon.

			MEK 1012436	Bostik NE 486 1013243 + 7-9% hardener 1001918
External ribbon is heated And removed using a fol reverse. Internal ribbon is sec. and removed using between sleeve and wris 10 sec. and separated us	ding stick. The s s heated on Cro a folding stick. t seal is heated	sleeve is ossover for 5-10 The seam I on Crossover for 5-		
The sleeve is reverse, the provided with rings. Edge of sleeve in the mid The wrist seal 4500136/ on the ring reverse out.	ddle of the ring. new no. 10149	53 is cleaned and put	С	
GLUEING: Fabric reverse/wr Wrist seal is averted ove		е	С	1xG
Gore-tex reverse Wrist seal face sid Indian tape 10030 Overlap 3 – 4 cm.			С	1xG 2xG 1xG
The suit is turned and pr NB - Do not inflate to the wider than the sleeve.				
Gore-tex face side Wrist seal Indian tape 10030			С	1xG 1xG 1xG
Overlap 3-4 cm The lap joint must be at to Disassemble balloon.	ront sleeve sea	ım.		
Glue mixture according t Glueing is carried out ac				
C = clean	G = glue	X = number	H = hardene	r



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7 Replacement of sleeve wrist seal.

Replacement of Codan wrist seals with knit, fabric no.1014953 for immersion suit made of PU-fabric.

			MEK 1012436	Bostik NE 486 1013243 + 7-9% Hardener 1001918
Internal ribbon is hear and removed using a The seam between sl Crossover for 5-10 sec. And sep	folding stick. eeve and wrist seal	is heated on		
The sleeve is reverse Edge of sleeve in the	•	d with rings.	C	
Fabric re Wrist sea Put on the wrist seal Place the edge of wrist sleeve all the way arc	al face side ring reverse out. 1½ st seal so that it folk		C	1,40
	reverse Il face side			1xG 1xG
Force the fold over the is 1½ - 2 cm over the knuckle it.		•		
The balloon shall rem	ain in the sleeve for	at least 16 hours.		
Glue mixture accordir Glueing is carried out				
C = clean	G = glue	X = number	H =	= hardener



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8 Replacement of sleeve wrist seal.

Replacement of Neoprene wrist seals, S-450013050xxL / S-450013050xxR for immersion suits made of Neoprene coated nylon.

	Heptane 1005112	Bostik NE486 1013243 +7-9% Hardener 1001918
Heat up external ribbon on Crossover for 5-10 sec. and removed using a folding stick. Turn the reverse of the sleeve out. Heat up the internal ribbon on Crossover for 5-10 sec. and removed using a folding stick. Heat up the joint between sleeve and wrist seal on Crossover for 5-10 sec. and removed using a folding stick.		
Turn the reverse of the sleeve out. Cut the edge straight and insert rings in the suit. Edge of sleeve along edge of ring. Wrist seal S-45001305050L / S-45001305050R (is pre glued) sizes 42K, 46K, 42, 46, 42L, 46L. Wrist seal S-45001305058L / S-45001305058R (is pre glued) all other		
sizes. <u>GLUEING</u> : fabric reverse Wrist seal face side	С	1xG 1xG
Mount wrist seal on sleeve such that the sleeve seam places the sewed-on elastic Remember an overlap of 1½ cm. Press down the Neoprene edge.		
Mount ribbon internally. Fabric reverse Wrist seal reverse Neoprene ribbon 1001312 Overlap 3-4 cm.	С	1xG 1xG 1xG
Turn sleeve and insert balloon. Mount ribbon externally.		
Fabric face side Wrist seal face side Neoprene ribbon 1001312	С	1xG 1xG 1xG
Overlap 3-4 cm. Joint at front most sleeve seam.		
Glue mixture according to VIKING norm 8.1. Glueing is carried out according to VIKING norm 8.2.		
C = clean $G = glue$ $X = number$ $H = hardener$		



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9 Replacement of sleeve wrist seal.

Replacement of Neoprene wrist seals for immersion suits made of Pazifik or Neoprene coated nylon.

Turn the reverse out of the suit. Heat up the ribbon with a heat gun or in crossover 5-10 sec. and remove it using a folding stick.	Heptane 1005112	Bostik NE486 1013243 +7- 9% Hardener
Dismantle the stitching or cut by the stitching.		1001918
MOUNTING OF WRIST SEAL BY GLUEING: Turn reverse out of the sleeve. Cut the edge straight and insert rings in sleeve. Edge of sleeve along edge of ring. Clean and glue reverse sleeve edge Glue wrist seal face side	С	1xG 2xG
Mount wrist seal on sleeve such that the wrist seal zipper is placed by the sleeve seam Notice, wrist seal right - sleeve right / wrist seal left - sleeve left.		
Overlap of 2 cm. Press down the edge and knuckle it.		
Fold the wrist seal edge over the ring, such that the seam is to be covered. Knuckle the Neoprene edge. Remove the ring and turn the sleeve at face side.		
Insert balloon in sleeve.		
Neoprene ribbon 25 mm, 1001313 Clean and glue face side sleeve/wrist seal Mount Neoprene ribbon at assembling at reverse side of sleeve and wrist. Assembling at front sleeve seam. Overlap 3-4 cm and knuckle it. Disassemble balloon.	C	1xG 1xG
REPLACEMENT OF WRIST SEAL BY SEWING. Turn reverse out of the sleeve. Cut the edge straight Clean and glue reverse sleeve edge		
Put the wrist seal in the sleeve – right side vs. right side – and sew it approximately 3 mm from the edge.	С	1xG
Glue the sleeve and wrist seal reverse Neoprene ribbon 25 mm, 1001313	С	1xG
Mount Neoprene ribbon at assembling at reverse side of sleeve and wrist Overlap 3-4 cm and knuckle it.		1xG
Carry out Glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue$ $X = number$ $H = hardener$		



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10 Replacement of sleeve wrist seal.

Replacement of Codan wrist seals 1001499, with zip for inner lining, for immersion suits made of Gore-tex.

	Heptane 1005112	Bostik NE486 1013243 +7- 9% Hardener 1001918
External ribbon is heated on Crossover for 5-10 sec. and removed using a folding stick. The sleeve is reverse. Internal ribbon is heated on Crossover for 5-10 sec. and removed using a folding stick.		
The sleeve is reverse, the edge is cut and the suit is provided with rings. Edge of sleeve in the middle of the ring. The wrist seal is cleaned and put on the ring reverse side out. 1½ cm is tucked in.	С	
GLUEING: Gore-tex reverse/wrist seal face side. Wrist seal is averted over the sleeve.		1xG
Reverse zip must be at front sleeve seam. Wrist seal right – sleeve right / wrist seal left – sleeve left. Overlap 2 cm. Disassemble balloon.		
The suit is turned and provided with a balloon. NB - Do not inflate to the extent that the wrist seal becomes wider than the sleeve.		
Gore-tex face side Wrist seal face side Indian tape 1003058	С	1xG 1xG 1xG
Overlap 3-4 cm The lap joint must be at front sleeve seam. Disassemble balloon.		
Glue mixture according to VIKING norm 8.1. Glueing is carried out according to VIKING norm 8.2.		
C = clean G = glue X = number	H = harden	er



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11 Replacement of sleeve wrist seal.

Replacement of Neoprene wrist seals for immersion suits made of Gore-tex.

REPLACEMENT OF WRIST SEALS BY SEWING.

- Turn the reverse out of the suit.
- Heat up the ribbon with a heat gun or in crossover 5-10 sec. and removed using a folding stick. Dismantle the stitching.
- Put the wrist seal in the sleeve right side vs. right side and sew it approximately 3 mm from the edge.
- Seam sealing tape over the stitches (Gore-Tex tape 22 mm 1007492).

THE SEAM SEALING TAPE MUST BE APPLIED BY MEANS OF SEALING MACHINE

		Heptane 1005112	Bostik NE486 1013243 +7-9% Hardener 1001918
Heat the external tape in the Cross with the folding stick. Reverse the sthe Crossover for 5-10 sec. and rer	sleeve. Heat the internal tape in		
Sleeve wrist seal left side Sleeve wrist seal right side			
Mount sleeve pieces on metal rings GLUEING: Gore-tex reverse Wrist seal face side	s with the reverse out.		1xG 1xG
Mount the wrist seal on the sleeve, at the front seam. Remember an own down the Neoprene edge.			
Mount Neoprene tape on the reverse <u>GLUEING</u> : Gore-tex reverse Wrist seal reverse Neoprene tape 1001312 Overlap, 3 to 4 cm. Roll or use a following seal reverse.		С	1xG 1xG 1xG
Turn sleeve and insert balloon. Mount Neoprene tape on the face s GLUEING: Gore-tex face side Wrist seal right side Neoprene tape 1001312	side.	С	2xG 1xG 1xG
Overlap, 3 to 4 cm. roll or use a fold The lap joint is to be at the front sle	•		
Carry out glueing according to VIKI Glue mixture according to VIKING			
C = clean $G = g$	ylue X = times	H = hardener	



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12 Replacement of sleeve wrist seal.

Replacement of Neoprene wrist seals with elastic and loop / Hook, 1003980/1003981 and S-450013250xxL / S-450013250xxR for immersion suits made of Neoprene coated Nylon.

Heat up the external ribbon with a heat gun and removed using a folding stick. Reverse the sleeve. Heat up the wrist seal with a heat gun and remove it.	Heptane 1005112	Bostik NE486 1013243 + 7-9% Hardener 1001918
Reverse the sleeve. Cut the edge straight and insert rings in the suit. Edge of sleeve along edge of ring.		
Sleeve wrist seal S-450013250xxL left side Sleeve wrist seal S-450013250xxR right side		
Mount sleeve pieces on metal rings with the reverse out. Clean and glue the sleeve edge reverse Wrist seal face side	С	1xG 1xG
Mount the wrist seal on the sleeve, so that external strap is at the front seam. Remember an overlap of 2 cm. Press down the neoprene edge. Disassemble the ring.		
Wrist seal right – sleeve right / wrist seal left – sleeve left. Press down overlap 2 cm.		
Mount Neoprene tape on the reverse. Clean and glue fabric and wrist seal reverse Neoprene tape 1001312 Overlap, 3 to 4 cm. Roll or use a folding stick.	C	1xG 1xG
Turn sleeve and insert balloon. Mount Neoprene tape on the face side. Clean and glue fabric and wrist seal face side Neoprene tape 1001312 Overlap, 3 to 4 cm. Roll or use a folding stick.	C	1xG 1xG
Disassemble balloon.		
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean G = glue X = times	H = hardener	



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13 Replacement of sleeve wrist seal.

Replacement of Codan rubber wrist seals, 1015038 for immersion suits made of PU fabric.

			MEK 1012436	Bostik NE 486 1013243 +7-9% hardener 1001918
Heat between sleeve and vand remove it with the foldi		ver for 5-10 sec.		
Mount sleeve pieces on me Edge of sleeve in the midd		everse out.		
Sleeve edge/re Clean the wris			C	
Mount the wrist seal on the 1½-2 cm. Place the fold of the wrist sway around.	-			
GLUEING: Sleeve/reverwist seal/face				1xG 1xG
Force the fold of wrist seal roll or knuckle it.	1½-2 cm over the e	edge of sleeve and		
Disassemble ring.				
Carry out glueing according Glue mixture according to	-			
C = clean	G = glue	X = times	H = harde	ner



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14 Replacement of sleeve wrist seal.

Replacement of rubber wrist seals, for immersion suits made of Gore-tex.

Replacement of tubber what seals, for infinersion suits mad			
REPLACEMENT OF WRIST SEAL BY GLUEING	Bostik NE 486	MEK 1012436	Bostik NE 486
Heat the external tape in the Crossover for 5-10 sec. and remove it with the folding stick. Reverse the sleeve. Heat the internal tape in	1013243 + 25%		1013243 + 7-9%
the Crossover for 5-10 sec. and remove tape and wrist seal or cut off the wrist seal close to stitches.	Heptane 1005112		hardener 1001918
Mount sleeve pieces on metal rings with the reverse out.			
Mount the grinded and cleaned wrist seal on the ring with the reverse out, and fold down 1½ cm. The fold must follow the edge of the sleeve all the way round.		С	
GLUEING: Gore-tex reverse	1xG		40
Wrist seal face side Force the wrist seal over the sleeve and knuckle it.			1xG
GLUEING: Gore-tex reverse / wrist seal reverse Neoprene ribbon 25 mm, 1001312 Glue down overlap, 3-4 cm. Knuckle with a folding stick.		С	1xG 2xG
Turn sleeve and insert balloon. NOTE: Do not inflate so much that the wrist seal becomes wider than the sleeve. GLUEING: Gore-tex face side Neoprene ribbon 25 mm, 1001312		C	1xG 2xG
Glue down overlap, 3-4 cm, knuckle with a folding stick. The lap joint is to be at the front sleeve seam.			ZAG
REPLACEMENT OF WRIST SEALS BY SEWING GLUEING: grind, clean and glue wrist seals 2 cm all way round. Gore-tex reverse Put the wrist seal in the sleeve - right side vs. right side - and sew it approximately 3 mm from the edge.	1xG	С	1xG
GLUEING: Glue Wrist seal and Gore-tex reverse Clean and glue the Neoprene ribbon 25 mm, 1001313		C Heptane	1xG 2xG
Insert balloon in sleeve. Mount Neoprene ribbon at assembling at reverse side. Overlap 3-4 cm and knuckle with a folding stick.		1001645	
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2			
C = clean G = glue X = times H = hardener			



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15 Replacement of sleeve wrist seal.

Replacement of rubber wrist seals 1022242 for immersion suits made of Neoprene coated nylon.

			MEK 1012436	Bostik NE 486 1013243 +7-9% hardener 1001918
External ribbon is heated of and removed using a folding reversed. Internal ribbon is sec. and removed using a between sleeve and wrist 10 sec. and separated using the sec. and separated using the sec.	ng stick. The slos heated on Cro folding stick. T seal is heated o	eeve is ossover for 5-10 he seam on Crossover for 5-		
The sleeve is reversed, the provided with rings. Edge of sleeve in the midd The wrist seal 1022242 is reverse out. 1½ cm is tuck	lle of the ring. cleaned and pu		С	
GLUEING: Fabric reverse/wrist Wrist seal is averted over			С	1xG
Gore-tex reverse Wrist seal face side Neoprene ribbon 1 Overlap 3 – 4 cm.			С	1xG 2xG 1xG
The suit is turned and prov NB - Do not inflate to the e wider than the sleeve.				
Gore-tex face side Wrist seal Neoprene ribbon 10	01312		С	1xG 1xG 1xG
Overlap 3-4 cm The lap joint must be at fro Disassemble balloon.	ont sleeve sean	ո.		
Glue mixture according to Glueing is carried out according				
C = clean	G = glue	X = number	H = hardene	r



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17 Replacement of sleeve wrist seal.

Replacement of Neoprene wrist seals S-450012450xxL/ S-450012450xxR with zip and elastic for immersion suits made of Gotland Gore Tex, with inner lining.

	Heptane 1005112	Bostik NE486 1013243 +7-9% Hardener 1001918
Heat up external ribbon with a heat gun and removed using a folding stick. The sleeve is reverse. Heat up the wrist seal with a heat gun and removed using a folding stick.		
Turn reverse out of the sleeve. Cut the edge straight and insert rings in the suit. Edge of sleeve along edge of ring.		
Wrist seal S-45001245050L / S-45001245050R sizes XS-S Wrist seal S-45001245058L / S-45001245058R sizes M-L-XL-XXL-XPL		
Glue wrist seal face side		1xG
Mount wrist seal on sleeve such that the wrist seal zipper is placed by the sleeve seam Notice, wrist seal right - sleeve right / wrist seal left - sleeve left.		
Overlap of 2 cm. Press down the edge.		
Fold the wrist seal edge over the ring, such that the seam is to be covered. Knuckle the Neoprene edge.		
Remove the ring and turn the sleeve at face side.		
Insert balloon in sleeve.		
Neoprene ribbon 1001312 Clean and glue face side wrist seal	C C	1xG 1xG
Mount Neoprene ribbon at assembling at external sleeve and wrist seal. Assembling at front sleeve seam. Overlap 3 - 4 cm.		
Disassemble balloon.		
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean G = glue X = number H = hardener		



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19 Replacement of sleeve wrist seal.

Replacement of rubber wrist seals, article no. 1022242 for immersion suits made of Gore-tex.

REPLACEMENT OF WRIST SEALS BY SEWING

- Cut off the wrist seal close to stitches
- Heat the external tape in the crossover, for 5-10 sec. and remove it with the folding stick.
- Prepare Sleeve wrist seal, 1022242 for GLUEING reverse.





- Clean (MEK, BB thinner 694, 1012436) and glue (Bostik 1013243 + 7–9 % hardener 2206, 1001918) 2½ cm all way round.
- Put the wrist seal 1022242 in the sleeve and sew it approximately 3 mm from the edge.
- Seam sealing tape over the stitches (Gore-tex 1007492).

 The seam sealing tape must be applied by means of sealing machine.



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1 Replacement of tape.

Replacement of tape for immersion suits made of Neoprene coated Nylon.

- Place the tape to be replaced in the crossover and heat it for 4 sec. at 180°C, or use a
 heating gun and pull it off with a folding stick. Remove all tape to be replaced in one
 operation.
- May also be removed using MEK article no. 1012436.
- Place the new tape, 1003570 over the seam and heat it for 4-6 sec. at 180°C in the crossover.
- Then pressed and smoothed with a folding stick. Remember to press and smooth surrounding tape that has been heated.



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2 Replacement of tape.

Replacement of tape for immersion suits made of Gore-Tex.

- Place the tape to be replaced in the crossover and heat it for 5 to 10 sec. at 180°C or use a heating gun and pull it off with a folding stick. Remove all tape to be replaced in one operation.
- Place the new tape:

1007492 grey 1001307 black 1001303 white 1001305 green

in the Crossover and heat it for 25 to 30 sec. at 180°C. Upon heating, press and smooth the tape with a folding stick.

- Finish all tape finishes with patches.
 Gore-tex patch 1014600 is to be applied by means of heat.
 - in Crossover heat it for 25 to 30 sec. at 180°C. Upon heating, press and smooth the tape with a folding stick.



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3 Replacement of seam sealing tape.

Replacement of tape for immersion suits made of PU-coated Nylon.

Place the seam sealing tape to be replaced in crossover, heat it for 4 sec. at 180°C and pull it off with a folding stick. Remove all tape to be replaced in one operation.

DO NOT USE THE CROSSOVER

• Mount the new seam sealing tape 1003570, - it must be applied by means of seam-sealing machine.



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1 Replacement of collar

Replacement of rubber collar for immersion suits made of Gore-tex material with inner lining.

Heat front zipper in Crossover 5-10 sec. and remove it with a folding	1005112 Heptane	1013243 Bostik NE 486 +7-9%
stick. (Don't use heating gun the fabric delaminate)		1001918 hardener
Internal ribbon between suit and collar is heated in Crossover 5-10 sec. Remove the ribbon with a folding stick. External ribbon is heated in Crossover 5-10 sec. – Remove ribbon and collar with a folding stick.		
The suit is put on the table with bag up and face side out. The shoulders are turning to reverse out. The suit is setting on shield.		
Clean undershot, zipper and collar	С	
Mark 2,5 cm in on under collar (left side) and mark out the point.		
Glue the neck edge 2 cm width, 1½ cm from zipper. Glue collar on skin side from mark out 2½ cm.		1xG 1xG
Cut undershot on bias (2cm)		
Glue undershot on edge (bias)		1xG
Mount the collar with 2cm deliberation all way round. Mount undershot.		
Clean, glue and mount Neoprene ribbon 1001313, 2½ cm Mark the suit for lining zipper (template 400) Zipper for lining S-5900580, is glued reverse in collar.	С	1xG
Collar reverse / zipper		2xG
Turn suit and put on shield. Clean the neoprene ribbon 1001312 Glue the suit Glue and mount the Neoprene ribbon.	С	1xG 2xG
Disassemble shield Glue undershot down.		1xG
Turn suit with bag up.		
Continued		
C=clean G = Glue X = Times H = Hardener		



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1 Replacement of collar

Replacement of rubber collar for immersion suits made of Gore-tex material with inner lining.

				1005112 Heptane	1013243 Bostik NE 486 +7-9% hardener 1001918
ZIPPER IS GLUED. 2 cm neoprene ribbon 100131 over undershot, under zipper.	2 is cleaned and glu	ued on left side, d	lown	С	1xG
2½ x 5 cm Indian tape is glued	on collars right side	e. 2½ cm on face	side.		1xG
Glue zipper on collar.					1xG
Indian tape and neoprene ribboundershot.	on is glued for fold c	on back of collar a	and		2xG
Cut collar on bias in surface.					
Collar and zipper is stitched to collar width – right side only, the		ıbling – left side, a	all		
Suit is laid with back up.					
The sewed on zipper and side.	l collar edge is clea	ned and glued or	face	С	1xG
Neoprene ribbon 100131	2 is cleaned and glu	ued.		С	1xG
Put on ribbon as cover ribbon of Collar edge is glued 2½ of Folded ca. 1 cm to face side.					1xG
Hook squares 2 pieces 101460 down along zipper.)2 marked up in rela	ations to loop stra	ıps		
Hook squares and collar	is cleaned, glued ar	nd put on.		С	1xG
Carry out glueing according to V Glue mixture according to VIKI					
C = clean	G = glue	X = times	H = ha	rdener	•



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3 Replacement of collar

Replacement of neoprene collar for immersion suits made of Gore-tex, with inner lining.

	1005112 Heptane	1013243 Bostik NE 486 +7-9% 1001918 hardener
Heat front zipper in Crossover 5-10 sec. and remove it with a folding stick. (Don't use heating gun the fabric delaminate)		
Internal ribbon between suit and collar is heated in Crossover 5-10 sec. (Don't use heating gun the fabric delaminate) Remove the ribbon with a folding stick. External ribbon is heated in Crossover 5-10 sec. – Remove ribbon and collar with a folding stick.		
MOUNTING OF COLLAR The suit is put on the table with bag up and face side out. The shoulders are turning to reverse out. The suit is setting on shield.	С	
Clean collar and zipper Glue the neck edge 2 cm width, 1½ cm from zipper. Glue collar on skin side 2½ cm width.		1xG 1xG
Mount the collar with 2 cm overlap all way round.	С	1xG
Clean, glue Neoprene ribbon 1001313, 2½ cm Mount the ribbon reverse.		
Zipper for lining S-5900580, is glued reverse the collar. Collar reverse / zipper ribbon		2xG
MOUNT RIBBON FACE SIDE Turn suit and put on shield. Clean and glue Neoprene ribbon 1001312 (2 cm). Glue the suit Mount the Neoprene ribbon.	С	1xG 2xG
Disassemble shield Turn suit with bag up.		
Continued		
C = clean $G = glue$ $X = times$ $H = hardener$		



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10.3 REPAIR REGULATIONS

3 Replacement of collar

Replacement of neoprene collar for immersion suits made of Gore-tex, with inner lining.

	1005112 Heptane	1013243 Bostik NE 486 +7-9% 1001918 hardener
ZIPPER IS GLUED ON COLLAR. 2½ x 5 cm Indian tape is glued on collars right side. 2½ cm on face side.		1xG
Glue zipper on collar.		1xG
Indian tape and neoprene ribbon is glued for fold on back of Collar. Cut the top edge of collar on bias.		2xG
Collar and zipper is stitched together at the assembling – left side, all collar width – right side only, the top half of collar.		
Suit is laid with back up.		
The sewed on zipper and collar edge is cleaned and glued on face side.	С	1xG
Neoprene ribbon 1001312 (2cm) is cleaned and glued.	С	1xG
Mount the ribbon as cover ribbon over sewing. Collar edge is glued 2½ cm from top edge on face of skin side.		1xG
Folded ca. 1 cm to face side.		
Hook square 1 piece 1014602, marked up in relations to loop strap down along left side of zipper.		
Clean, glue and mount Hook square	С	1xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue$ $X = times$ $H = hardener$		



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4 Replacement of collar

Replacement of neoprene collar for immersion suits made of Neoprene coated Nylon and Gore-tex, without lining.

	1005112 Heptane	1013243 Bostik NE 486 +7-9% 1001918 hardener
Heat front zipper in Crossover 5-10 sec. and remove it with a folding stick. (Don't use heating gun the fabric delaminate)		
Internal ribbon between suit and collar is heated in Crossover 5-10 sec. Remove the ribbon with a folding stick. External ribbon is heated in Crossover 5-10 sec. – Remove ribbon and collar with a folding stick.		
MOUNTING OF COLLAR The suit is put on the table with bag up and face side out. The shoulders are turning to reverse out. The suit is setting on shield.		
Clean collar and zipper reverse. Glue the neck edge 2 cm width, 1½ cm from zipper. Glue collar on skin side 2½ cm width.	С	1xG 1xG
Mount the collar with 2 cm overlap all way round.		
Clean, glue Neoprene ribbon 1015192 (2½ cm) Mount the ribbon reverse.	С	1xG
MOUNT RIBBON FACE SIDE Turn suit and put on shield. Clean and glue Neoprene ribbon 1001312 (2 cm) Glue the suit Mount the Neoprene ribbon.	С	1xG 2xG
Disassemble shield Turn suit with bag up.		
Continued		
C = clean $G = glue$ $X = times$ $H = hardener$	•	



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4 Replacement of collar

Replacement of neoprene collar for immersion suits made of Neoprene coated Nylon and Gore-tex, without lining.

	1005112 Heptane	1013243 Bostik NE 486 +7-9% 1001918 hardener
ZIPPER IS GLUED ON COLLAR. 2½ x 5 cm Indian tape is glued on collars right side. 2½ cm on face side.		1xG
Glue zipper on collar. Indian tape and neoprene ribbon is glued for fold on back of Collar. Cut the top edge of collar on bias.		1xG 2xG
Collar and zipper is stitched together at the assembling – left side, all collar width – right side only, the top half of collar.		
Suit is laid with back up.		
The sewed on zipper and collar edge is cleaned and glued. Neoprene ribbon 1001312 (2cm) is cleaned and glued.	C C	1xG 1xG
Mount the ribbon as cover ribbon over sewing.		
Collar edge is glued 2½ cm from top edge on skin side.		
Folded ca. 1 cm to face side.		
Hook square, 1 piece 1014602, marked up in relations to loop strap down along left side of zipper.		
Clean, glue and mount Hook square	С	1xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean G = glue X = times H = hardener	ı	



SER'	VICE MANUAL FOR VIKING IMMER	RSION SUITS	
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5 Replacement of collar

Replacement of neoprene collar S-4500096xx, for immersion suits made of Gore-tex Turn the reverse out of the suit.

- Heat tape with zipper for lining in crossover 5-10 sec. and remove it with a folding stick.
- Dismantle the stitching by under shot and front zipper and heat and remove tape by front zipper with the folding stick.
- Heat the tape between suit and collar in crossover 5-10 sec. or with a heating gun and remove it with the folding stick.
- Dismantle the stitching between suit and collar.
- Sew on the new collar right side vs. right side and sew it approximately 3 mm from the edge.
- Clean and glue Neoprene ribbon 25 mm, 1001313 (Heptane 1005112 and Bostik NE486 1013243 + Hardener 1001918)
- Glue Gore-tex and collar reverse
- Mount Neoprene ribbon at assembling at reverse of collar and seam. Overlap 3-4
 cm and knuckle with a folding stick.
- If lining is mounted, mount zipper for lining (see spare part list) in crossover reverse the suit.
- Glue the underlap (Bostik NE486 1013243 + Hardener 1001918), mount and knuckle with a folding stick.

with a folding stick.	
Turn face side out. Preglue the collar 2 cm all way round the edge. Mark up the hook square No. 1014602, in relation to loop strap down along left	Bostik NE486 1013243 +7-9% Hardener 1001918 2xG
side of zipper. Preglue the collar for the hook square piece.	2xG
Preglue the hook square. The glued edge is folded up 1 cm. Mount the hook square piece.	1xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2	
C = clean $G = glue$ $X = times$ $H = hardener$	



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6. Replacement of collar

Replacement of neoprene collar, for immersion suits made of Gore-tex without zipper for lining.

Heat up external ribbon I 10 sec. or with a heating Turn the reverse of the s suit and collar in crosso pull it off with a folding st	g gun and pull it o uit out. Heat up i ver 5-10 sec. or v	off with a folding stick. nternal ribbon betweer	1013243 + 25%	Heptane 1005112	Bostik NE486 1013243 + 7-9 % Hardener 1001918
Heat up the joint between and separate it with a for stitching between suit a stitches.	lding stick. If sev	ved then Dismantle the	Э		
MOUNTING OF WRIST	SEAL BY SEWI	NG:			
Turn the reverse out Clean and glu		collar on both sides	1xG	С	
Sew on the new coll approximately 3 mm		right side - and sew i	it		
	ex and collar reve at assembling at	reverse of collar and		С	1xG 1xG
or Mount seam-sealing to (Gore-tex 1007492).	ape, over the sea	am on back side			
THE SEAM SEALING MEANS OF SEALING		APPLIED BY			
Carry out glueing acc Glue mixture accordir					
C = clean	G = glue	X = number	H = hardener		



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7 Replacement of collar

Replacement of Dipco collar, 1006735 for immersion suits.

- Turn the reverse out of the suit.
- Heat the tape between suit and collar in crossover 5-10 sec. or with a heating gun and remove it with the folding stick.
- Dismantle the stitching.
- The collar 1006735 is to be cleaned (MEK 1012436) and covered with glue (Bostik NE 486 1013243 + 7–9 % hardener 2206 1001918) 3 cm wide at the bottom.

<u>NOTICE</u>: - If the defect collar was sewn with 3 mm seam, the new collar must be sewn on with 3 mm seam.

- If the defect collar was sewn with 6 mm seam and a stitching, then the new collar must be sewn on with 6 mm seam and a stitching from right side.
- Put the collar 1006735 right side vs. right side and sew it approximately 3 mm or 6 mm from the edge.
- Glue Wrist seal and Gore-tex reverse (Bostik NE 486 1013243 + 7–9 % hardener 2206 1001918)

The Neoprene ribbon 25 mm, 1001313 is to be cleaned (MEK 1012436) and glued (Bostik NE 486 1013243 + 7–9 % hardener 2206 1001918)

Mount Neoprene ribbon at assembling at reverse side.
 Overlap 3-4 cm and knuckle with a folding stick.

or

 Mount 2 x seam-sealing tape, with overlap, over the seam on back side (Gore-tex 1007492).

The seam sealing tape must be applied by means of sealing machine.



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11 Replacement of collar

Replacement of Dipco collar 1006735, for immersion suits made of Neoprene coated Nylon without lining.

	MEK 1012436	Bostik NE 486 1013243 + 7-9% hardener 1001918
External ribbon is heated in Crossover 5-10 sec. Remove ribbon with a folding stick. Turn the suit reverse out. Internal ribbon on collar is heated in Crossover 5-10 sec. Remove the ribbon with a folding stick Heat collar in Crossover 5-10 sec. and remove it with a folding stick.		
The suit is put on the table with reverse out. The suit is setting on shield.		
PREPERE THE COLLAR Grind surface of the glue. Clean surface of the glue on both sides.	С	
Mount the collar – reverse: Fabric reverse Collar 1006735 face side Mount the collar with 2 cm overlap all way round. Avoid pucker and folds.		1xG 1xG
Mount the ribbon - reverse: Fabric and collar reverse Neoprene ribbon 1001312 Mount the Ribbon with 3-4 cm overlap avoid pucker and folds.	С	1xG 1xG
Turn the suit face side out. Put it on shield. Mount the ribbon – face side: Glue the fabric, face side Glue the collar, face side Clean and glue neoprene ribbon 1001312 Mount the Ribbon with 3-4 cm overlap avoid pucker and folds.	С	1xG 1xG 1xG
Roll and knuckle after each assembling of glue. Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue$ $X = times$ $H = hardener$		



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12 Replacement of collar

Replacement of Neoprene collar S-4500121xx, for immersion suits made of Gore-tex.

	1005112 Heptane	1013243 Bostik NE 486 +7-9% 1001918 hardener
Heat front zipper in Crossover 5-10 sec. and remove it with a folding stick. (Don't use heating gun the fabric delaminate)		
Internal ribbon between suit and collar is heated in Crossover 5-10 sec. Remove the ribbon with a folding stick. External ribbon is heated in Crossover 5-10 sec. – Remove ribbon and collar with a folding stick.		
MOUNTING OF COLLAR The suit is put on the table with bag up and face side out. The shoulders are turning to reverse out. The suit is setting on shield.		
Clean collar and zipper Glue the neck edge 2 cm width, 1½ cm from the teeth of zipper	С	1xG
on booth sides. Glue collar on skin side 2½ cm width, omit the last 4 cm on left side of collar.		1xG
Mount the collar with 2 cm overlap. Right side: The edge of the collar finish 1½ cm from the teeth of the Zipper. Left side: The collar passes the teeth of the zipper 2½ cm, finish GLUEING 1½ cm at the teeth of the zipper.		
Clean, glue Neoprene ribbon 1001313 Mount the ribbon reverse.	С	1xG
MOUNT RIBBON FACE SIDE Turn suit and put on shield. Clean and glue Neoprene ribbon 1001312 Glue the suit Mount the Neoprene ribbon.	С	1xG 2xG
Disassemble shield Turn suit with bag up.		
Continued		
C = clean $G = glue$ $X = times$ $H = hardener$		



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12 Replacement of collar

Replacement of Neoprene collar S-4500121xx, for immersion suits made of Gore-tex.

	1005112 Heptane	1013243 Bostik NE 486 +7-9% 1001918 hardener
ZIPPER IS GLUED ON COLLAR. 2½ x 5 cm Indian tape is glued on collars right side. 2½ cm on face side.		1xG
Glue zipper on collar. Indian tape is glued for fold on back of collar.		1xG 1xG
Collar and zipper is stitched together at the assembling.		
Suit is laid with back up.		
The sewed on zipper and collar edge is cleaned and glued. Neoprene ribbon 1001312 is cleaned and glued.	C C	1xG 1xG
Mount the ribbon as cover ribbon over sewing.		
Hook square 1 piece 1014602, marked up in relations to loop strap down along left side of zipper.		
Clean, glue the collar face side Clean, glue and mount Hook square	C C	1xG 1xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue$ $X = times$ $H = hardener$		



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18 Replacement of Dipco collar 1006735 for immersion suits made of Gore-tex.

	Heptane 1005112	Bostik NE 486 1013243 +7-9% hardener 1001918
Turn the reverse out of the suit. Heat the internal tape with a heating gun and remove it with the folding stick. Heat the collar and remove it with the folding stick.		
* Grind 2 cm of the collar 1006735 on both sides. Mount the suit on the shield with the reverse out.		
Prepare the collar (ground), 1006735, for GLUEING on both sides.	С	
GLUEING: Gore-Tex / zip reverse 2 cm Collar face side		1xG 1xG
Mount the collar with 1½ cm overlap, without tucking and puckered. Roll or use a folding stick.		120
Mounting of tape: Gore-Tex / zip reverse / collar reverse. Neoprene tape 1001312	С	1xG 1xG
Mount the tape. Glue down an overlap of 3 to 4 cm; roll or use a folding stick.		120
Turn the face side out of the suit and mount it on the shield.		
Mounting of outside tape: Preglue Gore-Tex fabric Gore-Tex / zipper face side Collar face side Neoprene tape 1001312 Mount the tape Glue down an overlap of 2 to 4 cm; roll	С	1xG 1xG 1xG
Mount the tape. Glue down an overlap of 2 to 4 cm; roll or use a folding stick.		
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue$ $X = times$ H	= hardener	



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21 Replacement of collar

Replacement of collar S-4500119xx for immersion suits made of Neoprene coated Nylon.

	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
External ribbon and zipper is heated in Crossover 5-10 sec. Remove it with a folding stick.		
Turn the suit reverse out. Internal ribbon on collar is heated in Crossover 5-10 sec. Remove the ribbon with a folding stick Heat collar in Crossover 5-10 sec. and remove it with a folding stick.		
The suit is put on the table with bag up and face side out. The shoulders are turning to reverse out. The suit is setting on shield.		
Clean back cloth, zipper, collar and neck edge.	С	
Mark 2,5 cm in on under collar (left side) and mark out the point.		
Glue the neck edge 2 cm width, 1½ cm from zipper. Glue collar on skin side from mark out 2½ cm width.		1xG 1xG
Cut back cloth on bias (2 cm) Glue back cloth on edge (bias)		1xG
Mount the collar with 2 cm overlap all way round. Mount back cloth.		
Clean, glue and mount Neoprene ribbon 1001313		1xG
Mark the collar for lining zipper (template 400) Glue the collar to zipper for lining, 2½ cm width	С	2xG
Zipper for lining S-5900580, is glued reverse in collar. Collar reverse / zipper		2xL
MOUNT RIBBON FACE SIDE Turn suit and put on shield. Clean and glue Neoprene ribbon 1001312 Glue the suit Mount the Neoprene ribbon.	С	1xG 1xG
Disassemble shield Glue back cloth down. Turn suit with bag up. continued		1xG
C = clean G = glue X = times H = hardener	ı	ı



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21 Replacement of collar

Replacement of collar S-4500119xx, for immersion suits made of Neoprene coated Nylon.

	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
ZIPPER IS GLUED ON COLLAR Neoprene ribbon 1001312 is cleaned and glued on left side, down over back cloth, under zipper.	С	1xG
2½ x 5 cm Indian tape is glued on collars right side. 2½ cm on face side.		1xG
Glue zipper on collar. Indian tape and neoprene ribbon is glued for fold on back of collar and back cloth.		1xG 2xG
Cut collar on bias in surface.		
FINISH THE COLLAR Suit is laid with back up.		
The sewed on zipper and collar edge is cleaned and glued on face side.	С	1xG
Neoprene ribbon 1001312 is cleaned and glued.	С	1xG
Put on ribbon as cover ribbon over sewing on face side. Collar edge is glued 2½ cm from top edge on face side. Folded ca. 1 cm to face side.		1xG
Hook square 1014602 marked up in relations to loop straps down along zipper.		
Hook square and collar is cleaned, glued and put on.	С	1xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue$ $X = times$ $H = hardener$	<u>I</u>	I



SERVICE MANUAL FOR VIKING IMMERSION SUITS			
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23 Replacement of collar

Replacement of rubber collar (1013945 delivered from FMV) for immersion suits made of Gore-tex.

REPLACEM	ENT OF COLLAR		Heptane 1005112	Bostik NE 486 1013243 +7-9% Hardener 1001918
	ernal tape with a heating gun or in Crosson			
Clean the co	ollar.		С	
Mark out in	the middle of front and bag of the collar.			
GLUEING:	Collar on front Gore-Tex reverse 2 cm all way round			1 x G 1 x G
Mount the o	collar, roll and knuckle			
GLUEING:	Collar and fabric right side Clean and glue neoprene ribbon 100131	2	С	2 x G 1 x G
Mount the N	eoprene ribbon, roll and knuckle			
Glue down o	overlap, 3-4 cm, in the same way; roll or k	nuckle.		1 x G
	e according to VIKING standard 8.1 ueing according to VIKING standard 8.2			
C = clean	G = glue	K = times H	= hardener	



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24 Replacement of collar

Replacement of collar S-4500151xx, for immersion suit made of Neoprene coated Nylon.

inyion.			
Heat the back cloth and the internal zip off collar with a heating gun and remove with the folding stick. Heat the tape and remove it with the folding stick.	1032514 Bostik Vinycol+5% 1024195 hardener Desmodur	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
The suit is put on the table face out. The shoulders are turned reverse out. The neck opening is cut clean			
The loose end of zipper is ground reverse and outside. Put the suit on shield.			
Back cloth, neck edge and zipper are cleaned. Zipper is surfaced.	1xG	С	
Make a mark 2,5 cm in from left side of collar			
A 2 cm width of the neck edge is glued, 1½ cm from zipper.			1xG
Collar face side is glued, from mark 2½ cm width. Back cloth is glued on edge Mount the collar with 2 cm overlap, all the way round. Mount back cloth.			1xG 1xG
Clean, glue and mount Neoprene ribbon, 1001313, 2½ cm width.		С	1xG
Make a mark for lining zipper (template no. 591.1 + 591.2) Collar is glued from point, 2½ cm width. Zipper ribbon is glued - mount the zipper.			2xG
MOUNT RIBBON ON OUTSIDE The suit is put on the table reverse out. Put it on shield. 2 cm Neoprene ribbon 1001312 is cleaned			2xG
Suit and collar are glued. Neoprene ribbon is glued and mounted		С	2xG
Disassemble shield. Glue back cloth down.			1xG
Turn suit back up. Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2			1xG
C = clean G = glue X = times H = hardener			1



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24 Replacement of collar

Replacement of collar S-4500151xx, for immersion suit made of Neoprene coated Nylon.

MOUNT ZIPPER ON COLLAR	1032514 Bostik Vinycol+5% 1024195 hardener Desmodur	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
Collar and back cloth are glued Left side: Neoprene ribbon, 1001312, is cleaned and glued. Mount neoprene ribbon over back cloth, under the	1xG	С	1xG
zipper. <u>Right side</u> : 2½x5 cm Indian tape is glued reverse of collar. 2½ cm is glued on collar face side.			1xG 1xG
Glue the zipper on collar - until teeth. Indian tape and Neoprene ribbon are glued to the fold down on back of collar and back cloth.	1xG		2xG
FINISH THE COLLAR Suit is laid with back up.			
The sewed on zipper and collar edge is cleaned and		С	1xG
glued on face side. Neoprene ribbon 1001312 is cleaned and glued.		С	1xG
Put on ribbon as cover ribbon over sewing on face side.			
1 Hook square 1014602 marked up in relations to loop straps down along zipper.			
Hook square and collar is cleaned, glued and put on.		С	1xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2			
C = clean $G = glue$ $X = times$ $H =$	hardener		



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25 Replacement of collar

Replacement of collar S-4500151xx, for immersion suit made of Neoprene coated Nylon.

	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
Heat the back cloth and the internal zip off collar with a heating gun and remove with the folding stick. Heat the tape and remove it with the folding stick. The suit is put on the table face out. The shoulders are turned reverse out. The neck opening is cut clean		
The loose end of zipper is ground reverse and outside. Put the suit on shield.		
Back cloth, neck edge and zipper are cleaned reverse. Make a mark 2,5 cm in from left side of collar	С	
A 2 cm width of the neck edge is glued, 1½ cm from zipper. Collar face side is glued, from mark 2½ cm width. Back cloth is glued on edge Mount the collar with 2 cm overlap, all the way round. Mount back cloth.		1xG 1xG 1xG
Clean, glue and mount Neoprene ribbon, 1001313, 2½ cm width. Make a mark for lining zipper (template no. 591.1 + 591.2) Collar is glued from point, 2½ cm width. Zipper ribbon is glued - mount the zipper.	С	1xG 2xG 2xG
MOUNT RIBBON ON OUTSIDE The suit is put on the table reverse out. Put it on shield. 2 cm Neoprene ribbon 1001312 is cleaned Suit and collar are glued. Neoprene ribbon is glued and mounted	С	2xG 1xG
Disassemble shield. Glue back cloth down. Turn suit back up.		1xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue X = times H = hardener$	•	



SERVICE MANUAL FOR VIKING IMMERSION SUITS				
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25 Replacement of collar

Replacement of collar S-4500151, for immersion suit made of Neoprene coated Nylon.

Count down 3 teeth from collar edge on zipper NOTE: move the zipper stopper down. Cut to strap – round off the rest. Right side: Count down 3 teeth from collar edge, Cut the zipper so that the top edge is bevelled. (According fig.) MOUNT ZIPPER ON COLLAR Collar and back cloth are glued Left side: Neoprene ribbon, 1001312, is cleaned and glued. Mount neoprene ribbon over back cloth, under the zipper. Right side: 2½x5 cm Indian tape is glued reverse of collar. 2½ cm is glued on collar face side. C 1xG Indian tape and Neoprene ribbon are glued to the fold down on	43 NE 9% 18 ier
Collar and back cloth are glued Left side: Neoprene ribbon, 1001312, is cleaned and glued. Mount neoprene ribbon over back cloth, under the zipper. Right side: 2½x5 cm Indian tape is glued reverse of collar. 2½ cm is glued on collar face side. C 1xG 1xG 1xG	
Giue the zipper on collar - until teeth.	
Indian tape and Neoprene ribbon are glued to the fold down on back of collar and back cloth.	
2xG	
The sewed on zipper and collar edge are cleaned. Neoprene ribbon, 1001312, is cleaned 2 cm.	
Zipper and ribbon are glued. Mount the ribbon as cover ribbon over sewing. 1 Hook square, marked up in relations to loop strap down along left side of zipper.	
Collar + strap are cleaned and glued Mount collar and strap	
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2 C = clean	



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26 Replacement of collar

Replacement of Neoprene collar for immersion suit made of Nomex Gore tex.

	1		1
Heat the external tape with a heating gun and remove it with a folding stick. Turn the reverse out of the suit. Heat the internal tape with a heating gun and remove it with the folding stick. Remove the collar with the folding stick.	Bostik NE 486 1013243+ 25% Heptane 1005112	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
Turn the reverse out of the suit. Mount the shield (1018634) in Gore-tex Collar.			
Mark Gore-tex collar in front and back			
Preglue the Gore tex 2 cm wide.	1xG		
Mark the fabric straight in front and back. Glue the fabric 2 cm wide. Collar			1xG
The collar is cleaned reverse. Mark the collar straight in front and back, glue 2 cm face side. Mount the collar.		С	1xG
Roll or use a folding stick.			
Neoprene tape reverse side		С	1xG
Use the auxiliary equipment (1017952)			1xG
Glue collar and fabric.			IXG
Mount the neoprene tape reverse. Glue down an overlap of 2 to 4 cm; use a folding stick.			
Neoprene tape face side Glue collar and fabric Clean and glue Neoprene tape 1001313 Mount the neoprene tape face. Glue down an overlap of 2 to 4 cm; use a		С	1xG 1xG
folding stick.			



Г	C = clean	G = alue	X = times	H = hardener
	C - CICALI	G – uluc	V — III 1100	11 – Haluchel

SERVICE MANUAL FOR VIKING IMMERSION SUITS				
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26 Replacement of collar

Replacement of Neoprene collar for immersion suit made of Goretex.

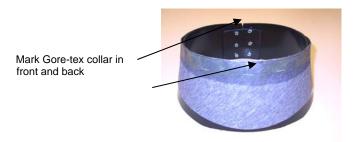
REPLACEMENT OF COLLAR BY SEWING

Cut of the collar by the stitches.

Heat the tape with a heating gun and remove it with a folding stick.

Turn the reverse out of the suit. Cut the edge straight.

Clean and glue reverse Goretex (Heptane 1005112 - glue Bostik NE 486 1013243+25% Heptane 1005112)



Put the neoprene collar in the fabric – right side vs. right side – and sew it approximately 3 mm from the edge.

Glue the collar and the fabric reverse (1013243 Bostik NE 486 +7-9% 1001918 hardener)

Neoprene tape reverse side

Clean and glue neoprene ribbon 25 mm, 1001313 (Heptane 1005112 – glue 1013243 Bostik NE 486 +7-9% 1001918 hardener)

Use the auxiliary equipment (1017952)





Mount neoprene ribbon at assembling at reverse side of collar and fabric. Overlap 3-4 cm and knuckle it.



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27 Replacement of collar

Replacement of collar S-4500151<u>40</u>, size 40, for immersion suit made of Gotland 3 layer.

	1032514 Bostik Vinycol+5% 1024195 hardener Desmodur	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
Heat the back cloth and the internal zip off collar with a heating gun and remove with the folding stick. Heat the tape and remove it with the folding stick. The suit is put on the table face out. The shoulders are turned reverse out. The neck opening is cut clean			
The loose end of zipper is ground reverse and outside. Put the suit on shield.			
Back cloth, neck edge and zipper are cleaned. Zipper is surfaced.	1xG	С	
Make a mark 2,5 cm in from left side of collar			
2 cm width of the neck edge is glued, 1½ cm from zipper. Collar face side is glued, from mark 2½ cm width. Back cloth is glued on edge Mount the collar with 2 cm overlap, all the way round. Mount back cloth.			1xG 1xG 1xG
Clean, glue and mount Neoprene ribbon, 1001313, 2½ cm width.		С	1xG
MOUNT RIBBON ON OUTSIDE The suit is put on the table reverse out. Put it on shield. 2 cm Neoprene ribbon 1001312 is cleaned Suit and collar are glued. Neoprene ribbon is glued and mounted		С	2xG 1xG
Disassemble shield. Glue back cloth down. Turn suit back up.			1xG
Carry out gluing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2			
C = clean G = glue X = times H = hardener	l		



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27 Replacement of collar

Replacement of collar S-4500151 $\underline{40}$, size 40, for immersion suit made of Gotland 3 layer.

SHORTING OF THE ZIPPER: Mark the collar edge (use template no. 406) Mark zipper from teeth, 1½ cm. Cut off the extra end of	1032514 Bostik Vinycol+5 % 1024195 hardener Desmodur	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
zipper to collar edge. Count down 3 teeth from collar edge on zipper NOTE: move the zipper stopper down. Cut to strap – round off the rest. Right side: Count down 3 teeth from collar edge. MOUNT ZIPPER ON COLLAR			
Collar and back cloth are glued Left side: Neoprene ribbon, 1001312, is cleaned and glued. Mount it over back cloth, under the zipper. Right side: 2½x5 cm Indian tape is glued reverse of	2xG	С	1xG
collar. 2½ cm is glued on collar face side. Glue the zipper on collar - until teeth. Indian tape and Neoprene ribbon are glued to the fold	10		1xG 1xG
down on back of collar and back cloth. The sewed on zipper and collar edge are cleaned. Neoprene ribbon, 1001312, is cleaned. Zipper and ribbon are glued.	1xG	C C	2xG
Mount the ribbon as cover ribbon over sewing. 1 Hook square, marked up in relations to loop strap down along left side of zipper. Collar + strap are cleaned and glued		-	2xG
Mount strap Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2			1xG
C = clean $G = glue$ $X = times$ $H = clean$: hardener		



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1 Replacement of socks

Replacement of socks for immersion suits made of Gore-Tex.

- Cut off the socks with scissors by the seam.
- Turn the suit reverse out. Heat the rest of tape in the Crossover for 5-10 sec. and remove it with the folding stick.
- Preglue the Gore-tex and sock reverse, Bostik NE 486 1013243+25% Heptane 1005112
- Sew the new socks onto the suit, right against right so that the seam width is 3 mm.
- Make sure that the socks mark forward.
- Sewing tread according to spare part list 1001544.
- The sock size depends on the suit size. (See spare-parts list)
- Place the suit with the reverse out, over the Crossover, apply the tape, 1007492, heat it for 25 to 30 sec. all the way round. Press and smooth the tape with a folding stick.
- Finish all tape finishes with patches.
- Gore-tex patch, 1014600, to be applied by crossover or means of heat, press and smooth the tape and patch with a folding stick.



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2 Replacement of socks

Replacement of socks for immersion suits made of neoprene coated nylon.

Cut off the socks with scissors by the seam.

- Turn the suit reverse out. Heat the rest of tape in the Crossover for 5-10 sec. and remove it with the folding stick.
- Sew the new socks onto the suit, right against right so that the seam width is 3 mm. Make sure that the socks mark forward.
 Sewing tread according to spare part list
- The sock size depends on the suit size. (See spare-parts list)
- Sewing thread according to spare parts list.
- Make sure that the socks mark forward.
- Place the suit reverse out, put the trouser leg over the Crossover, apply the tape, article no. 1003570, heat it for 25 to 30 sec. all the way round. Press and smooth the tape with a folding stick.



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1 Replacement of boots

Replacement of Bekina Thermolite and Harvik rubber boot, (se spare parts list) for immersion suits made of Gore-tex, without zipper for inner lining.

Heat the boot carefully. If the boots hat the boots' edge	ave not been replaced b	ing gun and separate them efore they may be cut off at	1012436 MEK	1013243 Bostik NE 486 + 7-9% 1001918 Hardener	1032514 Bostik Vinycol +5% 1024195 hardener Desmodur
Make the new replaced.	outer layer of ribbon. boots have the same le cm of the boots.	ength as the boots to be			
Glue and mou GLUEING:	int the zipper ribbon 2½ Zipper ribbon 1004602 Inside the boot			2xG 2xG	
	per ribbon as the line follong is to be on the revers	owing the top edge of boot. se leg/boot. Overlap of			
of trouser leg Insert balloon markings are	and fold the bottom 2-23	oot	С	1xG	11/0
G B Force the fold	Gore Tex reverse side toot onto zipper ribbon and an overlap of 2-2½ cm	the boot and knuckle.		1xG 1xG	1xG
В	Gore-tex face side coot ndian tape 1001309		С	2xG 1xG 1xG	
(overlap of 3 t backwards.	ge of the suit with Indian o 4 cm) is to be on the o				
Leave the ball	loon for min. 16 hours.				
	eing according to VIKING according to VIKING sta				
C = clean	G = glue	X = times	H = I	nardener	•



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2 Replacement of boots

Replacement of Harvik rubber boot article no. 1005663 (size 43 see spare parts list) for immersion suits made of Neoprene coated Nylon, with zipper for lining.

Heat the tape with a heating gun and remove it with a folding stick.	MEK 1012436	Fast Bond 1001642	1013243 Bostik NE 486 +7-9%
Heat the boot and the suit with a heating gun and separate them carefully.			1001918 hardener
Cut the Compass boot, it is to be 27 cm reverse heel. Grind the top 4 cm of the boots. Glue the zipper ribbon 1014622, reverse side.			2xG
Boot reverse side			2xG
Mount the ribbon as the line following the top edge of boot.			
The assembling is to be on the reverse leg/boot. Glue overlap of 3 to 4 cm.			
Place the suit on the table with the face side out. Mark the centre of trouser leg and fold the bottom 4½-5 cm of the trouser leg. Insert balloon in trouser leg and boot. Make sure that the centre markings are opposite each other. Inflate the balloon.			
Clean and preglue the boots	С		1xG
Fabric reverse side (notice by tape 2xG) Boot		1xG	1xG
Force the fold onto zipper ribbon and the boot and knuckle. Edge of suit is to be 1½ - 2 cm under the top edge of boot. Fabric face side Boot Indian tape 1001309	С		1xG 1xG 1xG
Cover the edge of the suit with Indian tape. The assembling (overlap of 3 to 4 cm) is to be on the outer leg, pointing backwards.			
Leave the balloon for min. 16 hours.			
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2			
C = clean $G = glue$ $X = times$ $H = harde$	ner		



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3

Replacement of bootsReplacement of Bekina boot (se spare parts list) for immersion suits made of Gore-tex, without inside zipper for innerlining.

removed usin	with a heating gun and remove it. May also be g Mek 694 article no. 1012436 on a brush. and the suit with a heating gun and separate	MEK 1012436	1032514 Bostik Vinycol +5% 1024195 hardener Desmodur	1013243 Bostik NE 486 +7-9% 1001918 hardener
at the boots of Please note: Remove the of Make the new replaced.	ave not been replaced before they may be cut off edge. the trouser legs will be 2.5 cm shorter. outer layer of ribbon. v boots have the same length as the boots to be 4 cm of the boots.			
centre of trou the trouser le	on the table with the right side out. Mark the ser leg and boot and fold the bottom 2-2½ cm of g. in trouser leg and boot. Make sure that the ags are opposite each other. Inflate the balloon.			
Clean and pre	eglue the boots	С	1xG	
GLUEING:	Gore-tex reverse side Outside of boot			1xG 1xG
	d onto the boot and knuckle. e an overlap of 2 to 2½ cm on the boot.			
GLUEING:	Gore-tex face side Boot Indian tape 1001309	С		2xG 1xG 1xG
(overlap of 3 backwards.	ge of the suit with Indian tape. The assembling to 4 cm) is to be on the outer leg, pointing the GLUEING must be knuckled with a folding			
Leave the bal	loon for min. 16 hours.			
•	eing according to VIKING standard 8.1 according to VIKING standard 8.2			
C = clean	G = glue X = times H = hardener	<u> </u>	1	<u> </u>



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4 Replacement of boots

Replacement of Bikina safetyboot article no. 1004460 (see spare parts list) for immersion suits made of Neoprene coated nylon, with zipper for lining.

Heat the tape with a heating gun and remove it with a folding stick.	MEK 1012436	1032514 Bostik Vinycol +5%	1013243 Bostik NE 486 +7-9%
Heat the boot and the suit with a heating gun and separate them carefully.		1024195 hardener Desmodur	1001918 Hardener
Make the new boots have the same length as the boots to be replaced. Grind the top 4 cm of the boots Glue Zipper ribbon 1014601 reverse side Clean and glue boot inside	С		2xG 2xG
Mount the zipper ribbon as the line following the top edge of boot. The assembling is to be on the inside leg/boot. Glue overlap of 3 to 4 cm.			
Place the suit on the table with the face side out. Mark the centre of trouser leg and fold the bottom 2-2½ cm of the trouser leg.			
Insert balloon in trouser leg and boot. Make sure that the centre markings are opposite each other. Inflate the balloon.			
Clean the boot and preglue Fabric reverse side Boot	С	1xG	1xG 1xG
Force the fold onto zipper ribbon and the boot and knuckle. Edge of suit is to be 1½ - 2 cm under the top edge of boot.			
GLUEING: Fabric face side Boot Indian tape 1001309 Cover the edge of the suit with Indian tape. The assembling (overlap of 3 to 4 cm) is to be on the outer leg, pointing backwards. Important: The GLUEING is to be knuckled with a folding stick	С		2xG 1xG 1xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2			
C = clean $G = glue$ $X = times$ $H = harden$	ы		



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5 Replacement of boots

Replacement of boots 1015209 for immersion suits made of PU-coated nylon.

- Dismount the buoyancy foam
 Disconnect the outer fabric from the inner lining at the ribbons by the boot Remove the inner lining through buoyancy zipper.
- 2. Cut the boot off with a pair of scissors. Cut in the middle of the seam between the suit and the boot.
- 3. Heat the remaining seam sealing tape in the crossover for 5 10 sec. and remove it with a folding stick. Also remove remaining sewing thread.
- 4. Turn the leg of the suit out through the buoyancy zipper so that the reverse of the fabric turns out. Place new boots reverses the leg and sew it together with the face side to face side and a seam width of 3 mm

DO NOT USE THE CROSSOVER

- 5. The seam is to be applied with seam sealing tape, article no. 1003570. The seam sealing tape must be applied by means of sealing machine.
- 6. Mount the inner lining in the boots and sew it together at the ribbons.
- 7. Turn the trouser leg back in the right position.
- 8. After repair, the suit must be retested.



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6 Replacement of boots

Replacement of PU boots 1004458 (se spare parts list) on Neoprene coated immersion suits without inside zipper ribbon.

			MEK BB 694 1012436	1013243 Bostik NE 486 +7-9% 1001918 hardener
Tape on the boots are heate Is removed. May also be rer brush.	noved using BB	694, 1012436 on a		
The boot and suit material is fully separated	s heated using a	heat gun and care-		
The boot is grinded 4.5 cm v	vide at the top.			
The suit is put on a table wit middle and trouser legs are Trouser leg/boot is attached in the middle.	folded 2 cm.	·		
Fabric reve Boot	rse side		С	1xG 2xG
The fold is averted over the The edge of the suit is to be boot.		w the top edge of the		
Fabric face Boot	side			2xG 1xG
Indian tape	1001309		С	1xG
Indian tape must cover the e 4 cm) must be on the outside	•	` .		
The balloon must stay a min	. of 16 hours.			
Carry out glueing according Glue mixture according to V				
C = clean	G = glue	X = number	H = hardener	



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7 Replacement of boots

Replacement of Compass rubber boots 1005664 (se spare parts list) for immersion suits made of Neoprene coated nylon and Gore-tex, without inside zipper ribbon.

	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 Hardener
Heat the tape with a heating gun and remove it with a folding stick. Heat the boot and the suit with a heating gun and separate them carefully.		
Cut the Compass boot, it is to be 27 cm reverse heel. Grind the top 4,5 cm of the boots.		
Place the suit on the table with the face side out. Mark the centre of trouser leg and fold the bottom 4½-5 cm of the trouser leg. Insert balloon in trouser leg and boot. Make sure that the centre markings are opposite each other. Inflate the balloon.		
Fabric reverse side (notice by tape 2xG) Boot	С	1xG 2xG
Force the fold onto zipper ribbon and the boot and knuckle. Edge of suit is to be 1½ - 2 cm under the top edge of boot.		
Fabric face side Boot Indian tape 1001309	С	1xG 1xG 1xG
Cover the edge of the suit with Indian tape. The assembling (overlap of 3 to 4 cm) is to be on the outer leg, pointing backwards.		
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean G = glue X = times H = hardener	•	



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8 Replacement of boots

Replacement of Harvik rubber boots (se spare parts list) for Immersion suits made of Gore-tex, with inside zipper ribbon for inner lining.

		1
Heat the tape with a heating gun and remove it with	Heptane	1013243
a folding stick.	1005112	ostik NE
Heat the boot and the suit with a heating gun and separate them carefully.		486 + 7-9%
If the boots have not been replaced before they may be cut off at the boots'		1001918
edge.		hardener
Please note: the trouser legs will be 2.5 cm shorter.		Hardener
in loads note: the trouser reger thin 20 210 cm chorter		
Remove the outer layer of zipper ribbon.		
Grind the top 4,5 cm of the boots.		
Mark zipper ribbon 2½ cm from edge.		
Place the suit on the table with the face side out. Mark the centre of trouser		
leg and boot and fold the bottom 2-21/2 cm of the trouser leg.		
Insert balloon in trouser leg and boot. Make sure that the centre markings		
are opposite each other. Inflate the balloon.		
GLUEING: Zipper ribbon 1014601, for reverse of boot		2xG
Inside the boot		2xG
Mount the zipper ribbon as the line following the top edge of		
boot. The assembling is to be on the reverse leg/boot. Overlap		
of 3 to 4 cm.		
Place the a 2 section table. 2th the force of the st. Mark the contraction of the		
Place the suit on the table with the face side out. Mark the centre of trouser		
leg and fold the bottom 4½-5 cm of the trouser leg.		
Insert balloon in trouser leg and boot. Make sure that the centre markings are opposite each other. Inflate the balloon.		
are opposite each other. Iffliate the balloon.		1xG
Gore-tex reverse side		1xG
Boot		
Force the fold onto zipper ribbon and the boot and knuckle.		
There is to be an overlap of 1½-2 cm on the boot.		
		2xG
Gore-tex face side	_	1xG
Boot	С	1xG
Indian tape 1001309		
Cover the edge of the suit with Indian tape. The assembling (overlap of 3 to		
4 cm) is to be on the outer leg, pointing backwards.		
Important: The glueing has to be knuckled with a folding stick		
Leave the balloon for min. 16 hours.		
Carry out glueing according to VIKING standard 8.1		
Glue mixture according to VIKING standard 8.2		



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REPAIR REGULATIONS <u>10.6</u>

Replacement of zipper
Replacement of zipper for immersion suits made of Gore-tex

	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
Heat up the tape at the collar with a heating gun and remove it carefully with the folding stick. Heat the collar and remove it carefully from the zipper with the folding stick. Unpick the stitches at the zipper and cut the neoprene tape along the zipper edge. (Don't heat the Gore-tex material as it will then delaminate)		
Sew in the zipper. Sew with Nomex 1001550 sewing thread.		
Place the suit on a table with the reverse out. Cut the zipper along the seam.		
GLUEING: Gore-tex reverse/ zipper. Neoprene tape 25 mm 1001313	C C	1xG 1xG
Mount the zipper in the left side to mark(A) Mount the zipper in the right side to mark(B)		
(adv. 12-14 cm) B (so that the tape covering the seam at collar will be able to cover it)		
Mount the tape when the GLUEING are dry and use a folding stick thoroughly.		
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2 Continued		
C = clean $G = glue$ $X = number$ $H = hardener$	1	



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1 Replacement of zipper

Replacement of zipper, for immersion suits made of Gore-tex

			1012436 MEK	1013243 Bostik NE 486 +7-9% 1001918 hardener
	ne collar 1006735 on both sidently the shield with the reverse of			
Prepare the colla	ır (ground), 1006735, for glue	eing on both sides.	С	
GLUEING:	Gore-Tex / zip reverse 2 cn Collar face side	n		1xG 1xG
	with 1½ cm overlap, without to use a folding stick.	tucking and		
Mounting of tape	: Gore-Tex / zip reverse / co Neoprene tape 1001312	llar reverse.	С	1xG 1xG
Mount the tape. (roll or use a folding	Glue down an overlap of 3 to ng stick.	4 cm;		
Turn the right sid	de out of the suit and mount	it on the shield.		
Mounting of outs	ide tape: Gore-Tex / zipper face side Collar face side Neoprene tape 1001312		С	1xG 1xG 1xG
Mount the tape. of roll or use a folding	Glue down an overlap of 2 to ng stick.	4 cm;		
	g according to VIKING standa ording to VIKING standard 8			
C = clean	G = glue	X = times	H = hardener	



SERVICE MANUAL FOR VIKING IMMERSION SUITS					
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REPAIR REGULATIONS 10.6

2

Replacement of zipper Replacement of zipper for immersion suits made of Gore-tex.

	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
Heat the external tape with a heating gun or in cross- over for 5-10 sec. and remove it with the folding stick Unpick the sewing and remove the zipper		
The zipper is cleaned with a lint free cloth (cotton)	С	
Sew on the zipper with sewing by 2-needles.		
Turn the suit reverse out – the zipper must be open. Cut the rubber along the sewing all way round		
GLUEING: Gore-Tex reverse / zipper Neoprene ribbon 1001313	С	1 x G 1 x G
Mount the Neoprene ribbon, roll and knuckle.		
Mount neoprene ribbon at the end of zipper. Use the same procedure as above mentioned		
GLUEING: Velcro 1006696 Cut the Velcro along the sewing.		1 x G
Glue mixture according to VIKING standard 8.1 Carry out glueing according to VIKING standard 8.2		
C = clean G = glue	X = times $H = h$	ardener



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3

Replacement of zipper
Replacement of zipper for immersion suits made of Neoprene coated nylon.

Heat the back cloth and collar with a heating gun and remove it with the folding stick. Turn the suit with right side out and cut the zipper stitch. Turn the suit reverse out, cut through the Indian tape all along the zipper, and remove the front zipper.	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
Do not remove the zipper for lining.		
The zipper is clean with a non-fluffy cloth The front zipper is sewn in the suit (template no. 824)	С	
Put the suit on a table reverse out, close the front zipper.		
Mount Indian tape on front zipper reverse the suit: Clean and glue Neoprene coated nylon/front zipper, back side. Clean and glue Indian tape 1001309	CC	1xG 1xG
Mount Indian tape at the bottom of the front zipper. Glue mixture according to VIKING standard 8.1 Carry out glueing according to VIKING standard 8.2		
Continued		
C = clean $G = glue$ $X = times$ $H = hardener$		



SERVICE MANUAL FOR VIKING IMMERSION SUITS					
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3 Replacement of zipper

Replacement of zipper for immersion suits made of Neoprene coated nylon.

REPLACEMENT OF FRONT ZIPPER FOR IMMERSION SUIT PS5041 AND R	REPLACEMENT OF FRONT ZIPPER FOR IMMERSION SUIT PS5041 AND PS5042					
SHORTING OF THE ZIPPER:	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener				
Mark the collar edge (template no. 406) Mark zipper from teeth, 1½ cm. Cut off the extra end of zipper to collar edge.		naruenei				
Count down 3 teeth from collar edge on zipper NOTE: move the zipper stopper down. Cut to strap – round off the rest. Right side: Count down 3 teeth from collar edge, Cut the zipper so that the top edge is bevelled. (According fig.)						
MOUNT ZIPPER ON COLLAR The collar and zipper are glued		40				
The sewed on zipper and collar edge are cleaned. Neoprene ribbon, 1001312, is cleaned 2 cm.	C C	1xG				
Zipper and neoprene ribbon are glued. Mount the ribbon as cover ribbon over sewing. 1 Hook square, marked up in relations to loop strap down along left side of zipper.		1xG				
Collar + strap are cleaned and glued Mount strap	С	1xG				
Glue mixture according to VIKING standard 8.1 Carry out glueing according to VIKING standard 8.2						
C = clean G = glue X = times H = hardener						



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4 Replacement of zipper PS5008

Replacement of zipper (4000932/new no. 1001493) for immersion suits made of Neoprene coated nylon with neoprene ribbon zipper.

•	•	·	• • •			
the folding stic	k.	ar with a heating	g gun and remo	ove it with	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
	everse out, cut	t through the in	dian tape all alc	ong the		
Do not remove	the zipper for	· lining.				
The zipper is on The front zipper		n-fluffy cloth ne suit (template	e no. 804)		С	
Put the suit on	a table revers	se out, close the	e front zipper.			
	e Neoprene co		the suit: ont zipper, back	side.	CC	1xG 1xG
		ttom of the from				
		to VIKING standar		aantina.d		
C = clean	G = glue	X = times	H = hardener	continued		
- 0.00.1	- 9					



SERVICE MANUAL FOR VIKING IMMERSION SUITS					
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4 Replacement of zipper for PS5008

Replacement of zipper (4000932/new 1001493) for immersion suits made of Neoprene coated nylon with neoprene ribbon zipper.

SHORTING OF THE ZIPPER: Mark zipper, left side, from tooth, 1½ cm. Find the point, where marking on zipper meet the point on collar. Cut a hole with a punch pliers and cut off to top edge of zipper.	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
(Se fig.) Place the zipper by the collar. Count down 3 teeth on zipper. Cut point and cut along teeth for point. Note: move the zipper stopper down. Cut the right side of zipper in same height.		
MOUNT ZIPPER ON COLLAR Collar and zipper are glued and mounted. Suit is laid with back up.		1xG
The sewed on zipper and collar edge s cleaned and glued on face side. Neoprene ribbon 1001312 is cleaned and glued.	С	1xG
Put on ribbon as cover ribbon over sewing on face side. Collar edge is glued 2½ cm from top edge on face side. Folded ca. 1 cm to face side.	С	1xG 1xG
Hook square 1014602 marked up in relations to loop straps down along zipper.		
Hook square and collar is cleaned, glued and put on. Glue mixture according to VIKING standard 8.1 Carry out GLUEING according to VIKING standard 8.2	С	1xG
C = clean G = glue X = times H = hardener	1	



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1 Replacement of front zipper.

Replacement of front zipper for immersion suit made of PU-coated nylon.

A seam-sealing mach to replace the front zip	opers.			1012436 MEK	1013243 Bostik NE 486 +7-9% 1001918	1032514 Bostik Vinycol +5% 1024195 hardener Desmodur
Heat the zipper and the					hardener	
Heat reverse at the joint disconnect with a folding (Be careful not to dama Heat the seam sealing to remove the tape.	stick. age the inner lini	ing)				
Unstitch the seam by the	e zipper and remo	ove the zipper.				
Thoroughly clean the rib wet and clean cloth.	bbon and the teet	h of the new zipp	er with a	С		
Sew on the new zipper a pair of scissors so that the			am with a			
Seam seal the zipper 2000311.	on the seam-se	ealing machine v	with tape			
DO NOT USE THE CRO Turn the suit reverse out fabric clamps. Clean and glue: Inner lin Zipper/	t and close the zip	oper. Mount the b	oard with	CC		1 x G
Mount the inner lining of folding stick. See that to outer fabric are placed in inner lining must be 1½ -	the neck seam on the same position	of the inner lining on and that the ed	and the	С		1 x G
Clean the zipper and glu Zipper Suit Hood Hook pad	e it to the hood.			С	1 x G 1 x G 1 x G	1 x G 1 x G
After repair, the suit mus	st be retested.			С	1 x G	
Carry out glueing according to	•					
C= Clean	G = Glue	X = Times	H = Hai	rdener	1	1



SERVICE MANUAL FOR VIKING IMMERSION SUITS				
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1 Replacement of hood

Replacement of Neoprene hood, No. 1015044 for immersion suits made of Neoprene Coated Nylon.

· · · · · · · · · · · · · · · · · · ·		
	1005112 Heptane	1013243 Bostik NE 486 +7-9% 1001918 hardener
Heat the front zip in the Crossover 5-10 sec. (Don't use a heat gun then the material delaminate)		
Heat the reverse ribbon between suit and hood in crossover 5-10 sec. and remove it with a folding stick.		
Heat the exterior ribbon in Crossover 5-10 sec and remove ribbon and hood with a folding stick.		
Hood 4500112, are cut bevel in edge by the neck. Mark the suit 2 cm down and 1½ cm from edge of zipper.		
Clean and glue the suit reverse. Glue the Neoprene hood Mount the hood 2 cm down the neck edge at the suit, and pres the neoprene edge down.	С	1xG 1xG
Hood reverse Suit reverse Neoprene tape 1001313 Glue the ribbon and knuckle it with a folding stick	С	2xG 1xG 1xG
Glue the zipper S-5900580 for inner lining, reverse the hood (template 400) Remove the suit from shield.		2xG
Glue the front zipper on hood: Hood face side Zipper reverse		2xG 1xG
Clean and glue Indian tape 1014602 Glue the suit Put the suit on the shield face side out.	С	1xG 2xG
Clean and glue Neoprene ribbon 1001312. Glue the suit and the hood reverse Mount Neoprene ribbon and knuckle it with a folding stick	С	1xG 2xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C= Clean G = Glue X = Times H = Hardener		



SERVICE MANUAL FOR VIKING IMMERSION SUITS						
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10.8 **2**

Replacement of hood Replacement of Neoprene hood article no.1015044, for immersion suits made of PU coated nylon

Heat the front zip in the Crossover 5-10 sec. (Don't use a heat gun then the material will delaminate)	1005112 Heptane	1013243 Bostik NE 486 +7-9% 1001918 hardener
Heat the reverse ribbon between suit and hood in crossover 5-10 sec. and remove it with a folding stick.		Hardonor
Heat the external ribbon in Crossover 5-10 sec and remove ribbon and hood with a folding stick.		
Hood 1015044, are cut bevel in edge by the neck. Mark the suit 2 cm down and 1,5 cm from zip edge.		
Clean and glue the suit reverse. Glue the Neoprene hood Mount the hood 2 cm down the neck edge at the suit, and pres the neoprene edge down.	С	1xG 1xG
Glue the hood reverse Glue the suit reverse Clean and glue the Neoprene tape 1001313 Glue the ribbon and knuckle it with a folding stick	С	2xG 1xG 1xG
Remove the suit from shield.		
Glue the front zipper on hood: Hood face side Zipper reverse		2xG 1xG
Clean and glue Indian tape 1014602 Suit Put the suit on the shield face side out.	С	1xG 2xG
Neoprene ribbon 1001312. Suit / hood reverse Mount Neoprene ribbon and Knuckle it with a folding stick	С	1xG 2xG
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C= Clean G = Glue X = Times H = Hardener		I



SERVICE MANUAL FOR VIKING IMMERSION SUITS				
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Replacement of hood

Replacement of Neoprene hood, no. 1015044 for immersion suits made of Neoprene Coated Nylon.

o o a control in the			
Heat the front zip in the Crossover 5-10 sec. (Don't use a heat gun then the material delaminate)	1013243 Bostik NE 486 +7-9% 1001918	1032514 Bostik Vinycol +5% 1024195 hardener	1005112 Heptane
Heat the reverse ribbon between suit and hood in crossover 5-10 sec. and remove it with a folding stick.	hardener	Desmodur	
Heat the exterior ribbon in Crossover 5-10 sec and remove ribbon and hood with a folding stick.			
Put the suit on the shield reverse out with open zipper. The Neoprene hood (1015044) is to be cutted bevel.			
Mark the suit 3 cm from neck and 0,5 cm from zipper.			
The suit and reverse zipper are cleaned and glued		1xG	С
The Neoprene hood is glued. The suit is to be glued according to marking. Mount the hood on the suit.		1xG 1xG	
Continued			
C = clean C = glue X = times H =hardener			



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10.8 **3.** Replacement of hood

Replacement of Neoprene hood, no. 1015044 for immersion suits made of Neoprene Coated Nylon.

		1000511	
	1013243 Bostik NE	1032514 Bostik	1005112 Heptane
	486 +7-9%	Vinycol +5%	Періапе
	1001918	1024195	
	hardener	hardener	
Suit is glued reverse		Desmodur	
The hood is glued reverse.	1xG		
The flood is glued reverse.	2xG		
Neoprene ribbon is to be cleaned and glued	2.0		
Mount the neoprene ribbon on the suit reverse.	1xG		С
Mount the neopicine hisbori on the suit reverse.	120		O
A. Vineral			
Turn the suit, mark for GLUEING next side.			
Suit and zipper are glued		1xG	
Suit and zipper are glued		120	
18			
A STATE OF THE PROPERTY OF THE			
Mark for Velcro (S-5900580) with template no. 639			
Indian tape is cleaned and glued			
Suit is cleaned		1xG	_
Mount the Velcro on the suit			С
Carry out glueing according to VIKING standard 8.1			
Glue mixture according to VIKING standard 8.2			
C = clean C = glue X = times H =hardener	<u> </u>	<u> </u>	
- G - 2			



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3. Replacement of hood

Replacement of Neoprene hood, no. 1015044 for immersion suits made of Neoprene Coated Nylon.





SERVICE MANUAL FOR VIKING IMMERSION SUITS			
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1 Replacement of gloves

Replacement of gloves no. 1012457, for immersion suits made of PU Coated Nylon.

	1012436 MEK	1032514 Bostik Vinycol +5% 1024195 hardener Desmodur
Cut of the glove, 5 cm from edge of outer fabric. Sew on (part 1008151) lengthen the sleeve and tape the sewing in cross-over. Tape no. 1003570.		
Be careful not to destroy the inner lining.		
Unstitch the glove from the inner lining. Place a new glove in the sleeve of the inner lining and sew it on with a seam width of 10 mm.		
		20
Fold the edge of the sleeve 2½ - 3 cm. Insert balloon in the sleeve and inflate it. Place the edge of the glove so that it follows the fold of the sleeve all the way around. The seam of the outer fabric and the inner lining shall be in the same place. Clean and glue the glove. Clean and glue the reverse of the sleeve	CC	2 x G 1 x G
Force the fold over the wrist seal so that the edge of the sleeve is 1½ - 2 cm over the seam of the glove and roll or knuckle it. The Balloon shall remain in the sleeve for at least 16 hours. After repair, the suit must be retested.		
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2 C = clean C = glue X = times H = hardener		



SERVICE MANUAL FOR VIKING IMMERSION SUITS			
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1 Repair of tears and holes

Repair of tears and holes on Gore-tex immersion suits.

Spare parts (see spare-parts list)

Repair small tears, maximum 5 mm, and small holes, maximum 3 mm, by applying a patch using the crossover.

Place the patch on the reverse so that the hole is at the centre of the patch, and heat it for 25 to 30 sec. Then smooth and press with a folding stick.

If the tears and holes are bigger, sew on a patch of fabric over the tears or holes. Then cut the edge straight on the reverse so that the seam width is 3 to 4 mm.

Preglue the Gore-tex reverse with Bostik NE 486 1013243 + 25% Heptane 1005112

Gore-tex tape is applied to the seam using the crossover.

The tape is to be heated for 25 to 30 sec. and then smoothed and pressed with a folding stick.

All tape finishes must have a patch applied using the Crossover. These too, is be heated for 25 to 30 sec. and then pressed and smoothed with a folding stick. Remember to press and smooth surrounding tape that has been heated.



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2 Repair of tears and holes

Repair of tears and holes for immersion suits made of PU-coated Nylon

			1012436 BB 694	1032514 Bostik Vinycol +5% 1024195 hardener Desmodur
Spare parts (see spare parts list)				
Small tears, maximum 0.5 cm, and sapplying a patch of fabric 1001253 with	•			
Clean and glue the suit Clean and glue the patch			C C	2 x G 2 x G
Place the patch over the damaged area a folding stick	a on reverse a	nd knuckle with		
DO NOT USE THE CROSSOVER				
If the tears and holes are bigger, sew tears or holes from the face side. internally so that the seam width is 3-4 applied to the seam by means of seam-	Then cut the 4 mm. Seam	edge straight sealing tape is		
After repair, the suit must be retested.				
Carry out glueing according to VIKING solue mixture according to VIKING stand				
C = clean $G = glue$ X	= times	H = hardener		



SERVICE MANUAL FOR VIKING IMMERSION SUITS				
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Repair of tears and holes

Repair of tears and holes for immersion suits made of Neoprene coated Nylon

	Heptane 1005112	1013243 Bostik NE 486 +7-9% 1001918 hardener
Spare parts (see spare parts list)		
Small tears, maximum 0.5 cm, and small holes, max 3 mm, by applying a patch of Neoprene ribbon 1001329 with glue on the reverse.		
Clean and glue the suit Clean and glue the patch	C C	1xG 1xG
Place the patch over the damaged area on reverse and knuckle with a folding stick		
If tears and holes are bigger, sew on a patch of fabric over the tears or holes from the face side. Then cut the edge straight internally so that the seam width is 3-4 mm.		
Glue neoprene tape on the reverse of the suit		
Clean and glue the suit Clean and glue Neoprene ribbon	C C	1xG 1xG
When the open time has been reached, attaches the tape and then smoothed and pressed with a folding stick.		
After repair, the suit must be retested.		
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue$ $X = times$ $H = harden$	ner	



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4 Repair of tears and holes

Repair of tears and holes for immersion suits made of Neoprene.

	Heptane 1005112	Bostik NE486 1013243 + 7-9% Hardener 1001918
Small tears, maximum 0.5 cm, and small holes, max 3 mm, by applying a patch, 3½ cm, of Neoprene ribbon 1001329 with glue on the reverse.		
Glue the suit reverse Clean and glue the patch	С	2xG 2xG
Place the patch over the damaged area on reverse and knuckle with a folding stick		
If tears are bigger, clean and glue the neoprene along tears. When the open time has been reached press the neoprene together.	С	2xG
Mount ribbon on the reverse side of the suit		
Glue the suit reverse. Clean and glue Neoprene ribbon	С	2xG 2xG
When the open time has been reached, attaches the neoprene ribbon and then smoothed and pressed with a folding stick.		
After repair, the suit must be retested.		
Carry out glueing according to VIKING standard 8.1 Glue mixture according to VIKING standard 8.2		
C = clean $G = glue$ $X = times$ $H = hardener$	r	



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1 Intake of collar.

Cut darts in the collar as shown in fig.	1013243 Bostik NE 486 +7-9% 1001918 hardener
If the collar has to be narrowed by more than 3 cm, two darts are required.	
Glue the edges together.	2xG
Mount ribbon 1015778, above the assembling from outside to reverse in one go without dividing the ribbon in two.	2xG
Then smooth and press with a folding stick.	
Carry out glueing according to VIKING standard 6.1 Glue mixture according to VIKING standard 6.2	
C=clean P=primer G=glue X=number H=hardener	



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1 Replacement of reflective tape.

REFLECTIVE TAPE WITH GLUE 1012511

• IF THE TAPE IS SEWED ON

Carefully remove the stitches. Do not damage the tape on backside.

• IF THE TAPE IS GLUED ON

Carefully heat the reflective tape with a heat gun and pull it off with a folding stick.

Glue the suit with Bostik NE 486 1013243 +7-9% hardener 1001918

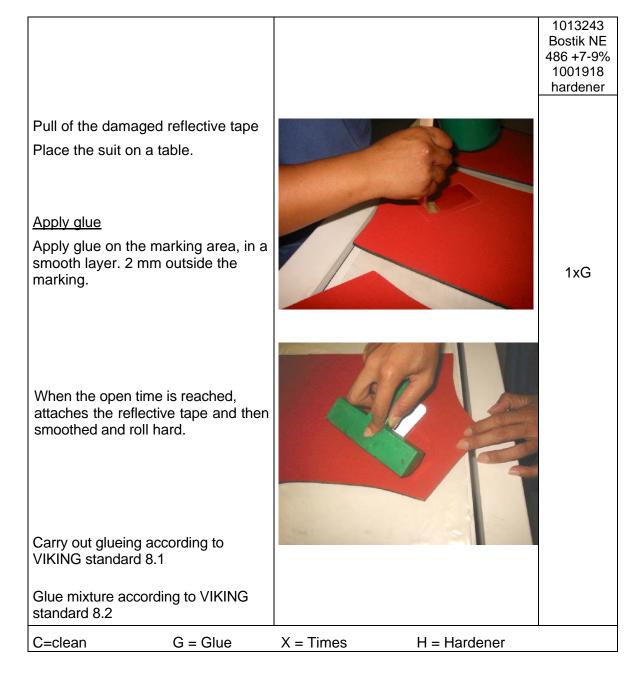
When the open time has been reached, remove the reverse of the retro-reflective tape, attach the tape and roll.



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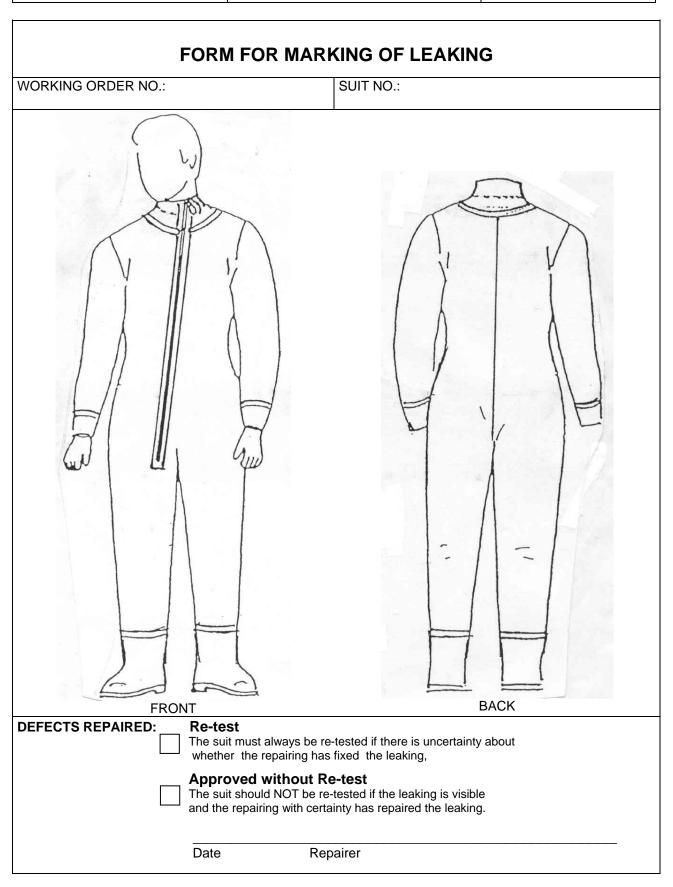
2 Replacement of reflective tape.

Replacement of reflective tape on immersion suit made of Neoprene.





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LEAKAGE TEST FORM

DESSIN NO.:	ORDER NO.:		DATE:						
SUIT NO.:									
Zipper: Leaking									
Broken									
Hole in fabric - numbers									
Seam sealing at front									
Seam sealing at legs									
Seam sealing at back									
Seam sealing at crutch									
Seam sealing at front									
Seam sealing at sleeves									
Collar									
Collar ribbon									
Boots									
Edge by boots									
Socks									
Edge by socks									
Wrist seals									
Edge by wrist seals									
REMARKS									
RE TEST									
APPROVED AFTER RE TEST									
APPROVED WITHOUT RE TEST									
THE SUIT IS OK									
HE SUITS MUST NOT BE RELEASE	ED BEFORE ALL ARE	OK OR SENT	TO RE TEST.						
PRESSURE TESTING:	SIGNATUR								



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VIKING LIFE-SAVING EQUIPMENT A/S DISCARDINGREPORT FOR IMMERSION SUIT									
Working order no.:	Customer:								
Dessin:	Ref. person:								
Individual suit no.:	Address:								
Suit size.:	City:								
Boot/ sock size.:	Country:								
Neck size:	Phone no.:								
Year of manufacture	Fax no.:								
Ex. Name / No:									

Reason for discarding of suit	Code	(X)
Defect - reparation economical irresponsible	1	
In general worn out	2	
Frontzipper defect	4	
Zippers defect	5	
Reflex defect	6	
Seam / seam sealing defect	7	
Wrist seals defect	8	
Boots defect	9	
Socks defect	10	
Collar/hood defect	11	
Lining defect	12	
Holes in fabric	13	
Buoyancy foam defect	14	
Light defect	15	
Fabric decomposed	16	
Damaged by demonstration-/exercise use	17	
Strong effect of heat	18	
Demolished of mildew	19	
Others	20	

Fill in by sales department.:	Yes	No.	No.	No.	Discarding approved by:	Discarding made by:
Suit returned to customer Suit destroyed:		21 22		24 25	~ :	~
New suit sold for customer:		23		26		Data
Order no.:						
Remarks:						



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ONTROLFORM FO	C=CHANGED, X = OK , - =NOT NEEDED)	NO.OF GLUEPATCHES NO.OF SEAM AESLING NO. OF REINFORCEMENT SUIT FABRIC LIGHT EXPIRY DATE. LIGHT/BULB / BATTERY BUOYANCY LINING HOOD LIFTING STRAP OUTSIDE COLLARTAPE INSIDE COLLARTAPE NECK COLLAR REFLECITVE TAPE SEAM SEALING SEAMS SEAMS SEAM SEALING BY BOOTS BOOTS	9												
NO I	\vdash		t	+		Н						_	Н	\forall	\dashv
ER		LINING	Ι												T
IMI	<u>a</u>	HOOD													\exists
GE GE		LIFTING STRAP	Т			П								П	٦
HAN HAN	ž	OUTSIDE COLLARTAPE													٦
ED/C	Ĭ	INSIDE COLLARTAPE													٦
E PAR		NECK COLLAR													٦
R. SE RE	* *	REFLECITVE TAPE													\Box
SAN S	GG.	SEAM SEALING													٦
PARI	ž_	SEAMS													
ING ING	<u> </u>	SEAM SEALING BY BOOTS	3												
8		BOOTS													
FOL	REPARING	SEAM SEALING BY SOCKS	3											\Box	
100000	11	SOCKS				Ц									\rfloor
1	CC	SEAM SEALING BY CUFFF	9												
	(CHECK WITH:	CUFFS													
	<u> </u>	ZIPPER													
	5	FRONTZIPPER													
		MONTH/YEAR													ON OBOGO NO.



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12. MODIFICATIONS

Replacement of light at PS4029 to article no. 1018938 McMurdo, manually light

McMurdo L5-M1 light is discontinued, therefore the article no. 1018938 L6 McMurdo, manually is applied.

Modification at light pocket is needed for following style: PS4029



The existing light pocket.



Cut the pocket flap close by the seam.



Dismantle the stitching by light pocket and remove the pocket



New light pocket article No. 1021212 (include Patch)



Sew on the pocket so that the stitch at the bottom is covered.



Heat on a patch, reverse the suit, in a cross-over. The patch must cove the stitching from the light pocket.



The patch is to be knuckled.



The light, article No. 1018938 L6 MCMURDO, MANUALLY is to be mounted.



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12. MODIFICATIONS

Replacement of light on PS5008, PS5041 and PS5042 to article no. 1018938 McMurdo, manually light

McMurdo L5-M1 light is discontinued, therefore the article no. 1018938 L6 McMurdo, manually, is applied.

New light pocket article 1021494: 1021454 Light pocket

1003570 Neoprene tape 22 mm 1004530 Rasant thread 75, blue



The existing light pocket.

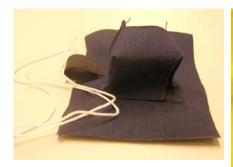
Cut off the whistle if mounted.



Dismantle the stitching by light pocket and remove the pocket and pocket flap if mounted.



Mark for new pocket approximately ½ cm around the stitches.



Light pocket article 1021494



Fold the edge 1 cm against the back side.



Sew on the pocket make sure that the old stitches are covered.

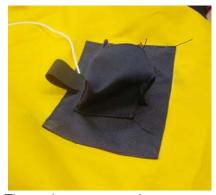


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12. MODIFICATIONS

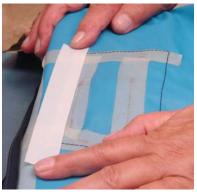
Replacement of light on PS5008, PS5041 and PS5042 to article no. 1018938 McMurdo, manually light



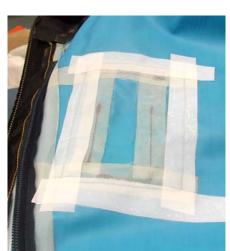
The pocket sewn on suit.



The stitches must be sealed on the reverse side with tape, article no. 1003570 in cross over.



Place the tape and heat in cross over 15 sec. by 160°C. Beware do not heat on zippers, collar or trim.



All stitches must be covered.



The whistle and new light, article No. 1018938 L6 MCMURDO, MANUALLY is to be mounted.