

Service Manual

for the air- pressure test & repair of immersion suits

Inspection Device for Immersion suits 70168



The aluminum kit contains a set of Servicing Equipment.

- A Face fixture (two parts)
- **B** Pressure gauge (0-6kPa)
- **C** Foot pump (with multi-valve adaptor)
- \boldsymbol{D} Glue and applicator

Instruction process

1. Adjust the air-pressure test cevice on the immersion suit



1. Lay the immersion suit on a work table and check for damages.



2. Place Face Fixture (Part 1) inside the immersion suit hood area and zip up. Attention: Stretch the hood fabric by pulling it to the direction of arrows. The hood should not have any folds.



3. Place Face Fixture (Part 2), by adjusting its holes carefully through the bolts and joints.



4. Above is an example image of assembled face fixtures with hood. Attention: The zipper head should pass through the hole.





5. Install the o-ring gasket



6. Tighten up the <u>butterfly nut</u> so as to eliminate leakage around the face seal.



7. Check the operational condition of pressure gauge (Dial surface & Pointer).



8. Insert the Pressure Gauge at face fixture socket, at the same time press down the joint and secure the connection between them.



9. Install the Connector for the foot pump, by pressing down the proper joint, so as to insert it properly.



10. Adjust the multi-valve adaptor on the connector of face fixture.



2. Air - test procedure



1. Provide air into the suit, through the foot pump. Pressure should be from 0, 7 up to 1,4Kpa (0.1 to 0,2psi) [acc. MSC/Circ.1114.] Maintain the pressure to those limits for the air-test. (It is normal that some bubbles appear at the zipper slides and at the zipper toothed part in the face fixture).



2. Sprinkle along seams and closures of the immersion suit with a soapy water solution.



3. Check carefully if any bubbles appear from the Immersion Suit and mark properly the leaking areas of the suit.

3. Repair procedure

Remove the air-test device and clean the suit thoroughly with fresh water and dry it, trying to leave the marks visual.

A. Repair of seams and closures



1. Adapt the applicator on the glue tube for use.



2. Above is an example image of assembled face fixtures with hood. Apply a gentle amount of glue on the marked leaking areas. Let it dry for 8-10 minutes. Then apply once again, a glue layer on the immersion suit damaged area. Let it dry for 8 hours.

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B. Repair of Rips, Tears and Punctures



1. With use of glue tube and applicator, apply a glue layer on both sides of immersion suit damaged area.



2. Let it dry for 8-10 minutes. Then apply, once again, a glue layer on both sides of Immersion suit's damaged area.



3. Then press the 2 sides together for 2 minutes. Let the immersion suit dry for 8 hours.



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