



# Maintenance Procedure Card

## Modular Industrial Dry Suit

### ITEM 1. MODULAR STYLE INDUSTRIAL DRY SUIT PERSONAL ISSUE BUILD UP PROCEDURE

#### PARTS REQUIRED

Version 1:	MSD900 Breathable Marine Survival System
Version 2:	MSD901 Breathable Marine Survival System

#### NOTE

All new industrial style dry suits shall be purchased off the HQ managed contract. Contract number HSCG23-06-D-DNQ299

#### TOOLS REQUIRED

1/2 Inch Stencils (marking pens with black indelible ink may be used in lieu of stenciling)  
 Scissors

#### CONSUMABLES

Black Stencil Ink	7510 00 469 7910
Paraffin	9160 00 285 2044
Disinfectant/detergent	7930 01 346 4289
Leak Detection Compound	6850 00 621 1820

1. Stencil a locally generated serial number on the top inside of the slide fastener cover (marking pens with black indelible ink may be used in lieu of stenciling).
2. Ensure the Modular Industrial Dry Suit is assembled in accordance with the assembly procedure, steps 36 through 59, in ITEM 2.
3. Document personal issue by recording serial number and user information on AF Form 538.
4. Record serial number and date placed in service on Modular Industrial Dry Suit maintenance log.

### ITEM 2. MODULAR INDUSTRIAL DRY SUIT SEMI-ANNUAL INSPECTION AND CLEANING

#### TOOLS REQUIRED and CONSUMABLES

See lists in ITEM 1 above.

1. Remove the bladder from the head pillow cover through the cover split under the back.
2. Unsnap and fold open the hood.



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3. Roll back the outer shell wrist material approximately 3 inches to expose the wrist interconnection zipper.
4. Unzip the interconnection zipper.
5. Repeat steps 3 and 4 for the opposite wrist.
6. Fold open the outer shell around the waist to expose the upper and lower waist interconnection zippers.
7. Unzip the upper zipper in the center of the back.
8. Unzip the lower zipper to completely disconnect the outer shell from the immersion module.
9. Remove the outer shell from the immersion module.
10. Empty contents from all pockets.
11. Close all vent and pocket zippers prior to washing outer shell.
12. Completely loosen the neck seal drawstring.
13. Roll back the neck seal exposing the neck thermal lining interconnection zipper.
14. Unzip the neck thermal lining interconnection zipper.
15. Unzip the waterproof zipper around the waist circumference and fold the suit open to expose the upper and lower waist interconnection zippers.
16. Unzip the upper and lower waist interconnection zippers.
17. Unzip the upper and lower interconnection zippers adjacent to the waterproof relief zipper.
18. Reach between the immersion module and thermal liner to the wrist and pull wrist cuff through inside out exposing the interconnection zipper.
19. Unzip the wrist interconnection zipper.
20. Repeat steps 18 and 19 for opposite wrist.
21. Reach between the immersion module and thermal liner to the ankle and pull the ankle cuff through inside out exposing the ankle interconnection zipper.
22. Unzip the ankle interconnection zipper.
23. Repeat steps 21 and 22 for opposite ankle.
24. Lay out the head pillow and each module for inspection.
25. Inflate the head pillow through the inflation tube to a firm test pressure and lock valve closed.
26. Apply leak detection compound to the inflation tube valve and at the base of the tube on the bladder connection point. Inspect for signs of leakage. Repair bladder leaks with Aquaseal adhesive. Leaks in inflation tube or tube base require head pillow replacement.
27. Inspect the outer shell over its entire surface area for cuts, tears and seam separations. Any damage found shall be repaired prior to further use.
28. Inspect the immersion module over its entire surface area for cuts, tears and seam tape separations. Return the immersion module to the manufacture for repairs or replacement.
29. Inspect the thermal liner over its entire surface area for cuts, tears and seam separations. Any damage found shall be repaired prior to further use.
30. Hand wash the thermal liner in disinfectant/detergent and rinse thoroughly in fresh water. Hang the thermal liner until completely dry.



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31. Machine-wash the outer shell and immersion module using disinfectant/detergent in warm (100° F) water. Hang the outer shell until completely dry. The immersion module may be machine dried on a low heat setting.
32. Inspect the waterproof entry and relief zippers on the immersion module for ease of operation over the entire length. Slide fasteners with loose or missing teeth shall be repaired prior to further use. Lubricate the slide fastener with paraffin.
33. Recheck the inflation pressure on the head pillow bladder. A significant decrease in pressure requires reinflation for repair.
34. Ensure the outer shell, immersion module and thermal liner are completely dry before reassemble.
35. Install the bladder into the head pillow cover on the outer shell. Route the inflation tube through to the tube sleeve to the front of the shell.
36. Lay the immersion module out face down with the waterproof relief zipper face down.
37. Lay the thermal liner out face down with the seams out on top of the immersion module.
38. Reach through the leg portion of the immersion module to the foot and pull the foot out to expose the interconnection zipper.
39. Mate the thermal liner and immersion module ankle interconnection zipper and zip completely closed.
40. Pull the foot of the immersion module right side out.
41. Repeat steps 38, 39 and 40 for opposite leg.
42. Zip the upper and lower interconnection zippers adjacent to the waterproof relief zipper.
43. Reach through the arm portion of the immersion module to the wrist and pull the wrist out to expose the wrist interconnection zipper.
44. Mate the thermal liner and immersion module wrist interconnection zipper and zip completely closed.
45. Pull the wrist of the immersion module right side out.
46. Repeat steps 43, 44 and 45 for opposite wrist.
47. Zip the upper and lower waist interconnection zippers.
48. Roll back the neck seal exposing the neck thermal lining interconnection zipper.
49. Mate the thermal liner and immersion module neck interconnection zipper and zip completely closed.
50. Lay the outer shell out face down.
51. Lay the assembled immersion module and thermal liner out face down on top of the outer shell.
52. Route the leg portions of the assembled immersion module and thermal liner through the leg portions of the outer shell.
53. Route the sleeve/arm portions of the assembled immersion module and thermal liner through the sleeve/arm portions of the outer shell.
54. Roll back the outer shell wrist material approximately 3 inches to expose the wrist interconnection zipper.
55. Zip the wrist interconnection zipper.



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56. Repeat steps 54 and 55 for the opposite wrist.
57. Fold open the outer shell around the waist to expose the upper and lower waist interconnection zippers.
58. Zip the lower zipper interconnection completely around the circumference of the outer shell.
59. Zip the upper interconnection zipper in the center of the back.
60. Restore serial number as required.
61. Record semi-annual inspection and cleaning on Modula Industrial Dry Suit maintenance log.

### ITEM 3. MODULAR INDUSTRIAL DRY SUIT ANNUAL LEAK TEST

#### TOOLS REQUIRED and CONSUMABLES

See lists in ITEM 1 above.

1. Perform leak test as follows.
  - a. Have the member don undergarments, socks, the dry suit and boots. A hood and gloves shall be worn if required for the local climate
  - b. Have the member enter a body of water deep enough to allow him/her to stand or swim immersed to the top of the neck seal. After a minimum of 15 minutes, have the member exit the water.
  - c. Ask the member whether the dry suit leaked. Minor seepage around the wrist and neck seals is normal and does not indicate a leak. Isolated water soaked spots on the undergarment, or soaked socks, indicates a leak. Flooding into the dry suit socks indicates a serious leak.
2. If the suit does not leak proceed with item 2.

#### NOTE

Get a quote for non-warranty repair service. Replace the dry suit if the repair cost is more than the price of a new dry suit

3. For repairs return the dry suit to the manufacturers authorized repair facility.
4. Record date and annual leak test complied with on the Modular Industrial Dry Suit maintenance log.