

MSD900



Industrial Immersion Work Suit
User Manual

1. Name _____		<input type="checkbox"/> Mr <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms <input type="checkbox"/> Miss	
Address _____		Date of birth: M D Y	
City _____	State _____	Zip _____	
Phone (h) _____	(w) _____	Email _____	
2. Which Mustang product did you purchase? _____		Date of purchase: M D Y	
3. Where did you purchase your Mustang product? _____			
4. Please rate from 1–5 the most important features to you (1 = most important)	7. Which other Mustang products have you owned? (Check all that apply)	10. Have you ever visited a company's online web site?	14. Which describes your family income?
<input type="checkbox"/> Safety	<input type="checkbox"/> Children's PFD	<input type="checkbox"/> Yes	<input type="checkbox"/> Under \$30,000
<input type="checkbox"/> Protection	<input type="checkbox"/> Youth PFD	<input type="checkbox"/> No	<input type="checkbox"/> \$31,000 - \$50,000
<input type="checkbox"/> Comfort	<input type="checkbox"/> Adult PFD		<input type="checkbox"/> \$51,000 - \$80,000
<input type="checkbox"/> Durability	<input type="checkbox"/> Inflatable PFD	11. NOT including yourself, what are the AGES of the other people living in your household?	<input type="checkbox"/> Over \$80,000
<input type="checkbox"/> Other _____	<input type="checkbox"/> Paddling Vest	_____ <input type="checkbox"/> F <input type="checkbox"/> M	15. In the last six (6) months have you or others in your household: (check all that apply)
5. How often will you do these activities per month?	<input type="checkbox"/> Fishing vest	_____ <input type="checkbox"/> F <input type="checkbox"/> M	<input type="checkbox"/> Purchased clothes through the mail?
<input type="checkbox"/> Fishing (ocean)	<input type="checkbox"/> Industrial work vest	_____ <input type="checkbox"/> F <input type="checkbox"/> M	<input type="checkbox"/> Purchased gifts through the mail?
<input type="checkbox"/> Fishing (river & lakes)	<input type="checkbox"/> Bomber jacket	_____ <input type="checkbox"/> F <input type="checkbox"/> M	<input type="checkbox"/> Worked in your garden?
<input type="checkbox"/> Fishing (ice)	<input type="checkbox"/> Flotation coat	_____ <input type="checkbox"/> F <input type="checkbox"/> M	<input type="checkbox"/> Traveled on vacation?
<input type="checkbox"/> Power Boating	<input type="checkbox"/> Anti-exposure Coverall	_____ <input type="checkbox"/> F <input type="checkbox"/> M	<input type="checkbox"/> Purchased a PC or PC software?
<input type="checkbox"/> Sailing	<input type="checkbox"/> Ship Abandonment Immersion Suit	12. Your marital status: (check one)	<input type="checkbox"/> Purchased two or more books?
<input type="checkbox"/> Water Skiing	<input type="checkbox"/> Ice Rescue Suit	<input type="checkbox"/> Married	<input type="checkbox"/> Purchased cassettes / CDs?
<input type="checkbox"/> Paddle Sport	<input type="checkbox"/> Other _____	<input type="checkbox"/> Single	<input type="checkbox"/> Donated to wildlife / environmental causes?
<input type="checkbox"/> Snowmobile	8. What magazines do you read at least 3 times per year?	<input type="checkbox"/> Common Law	<input type="checkbox"/> Donated to charities?
<input type="checkbox"/> Industrial Marine	_____	13. Education (check all that apply)	
<input type="checkbox"/> Law Enforcement / Coast Guard	_____	<input type="checkbox"/> High school	
<input type="checkbox"/> Military	_____	<input type="checkbox"/> Some college	
<input type="checkbox"/> Other _____	_____	<input type="checkbox"/> Completed college	
6. Which season will you use your product? (check all that apply)	9. How did you first hear of Mustang? (check only one)	<input type="checkbox"/> Graduate school	
<input type="checkbox"/> Fall	<input type="checkbox"/> Saw others using it	16. Please tell us more about why you purchased this product or give us your comments and suggestions:	
<input type="checkbox"/> Winter	<input type="checkbox"/> In a store	_____	
<input type="checkbox"/> Spring	<input type="checkbox"/> Advertising	_____	
<input type="checkbox"/> Summer	<input type="checkbox"/> Trade Show	_____	
	<input type="checkbox"/> Magazine	_____	
	<input type="checkbox"/> Internet	_____	

Thank you for filling out this questionnaire.

We value your answers and inputs. Please check ☐ if you do not wish to learn more about Mustang or obtain the latest information on new technologies and exciting products being developed for you.

Postage
Required

Marketing Department

MUSTANG SURVIVAL

3870 Mustang Way
Bellingham, WA
USA 98226

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Things you should know

Registration

It is very important that you complete and immediately mail the self-addressed registration card attached. By returning the completed registration card you will ensure updated or new information regarding the MSD900 is sent to you.

Application

The MSD900 industrial immersion work suit may be used in lieu of traditional dry suit and anti-exposure work suits when a suit of greater durability, comfort and protection from exposure to cold is required. The MSD900 provides inherent buoyancy as well as protection from exposure to cold temperature, wind, sea spray and rain.

WARNING

For optimum performance, it is recommended that users wear polypropylene underwear beneath the MSD900.

Configuration

The MSD900 provides hypothermia protection and inherent buoyancy using three interconnected modules to form a single system. Each module can be repaired or replaced individually. The first module incorporates Mustang's patented breathable foam, (United States Patent No.5267519 and Canadian Patent No.2082793); it is a thermal liner that functions as a second layer of protection and provides inherent buoyancy. The second module is the immersion module and provides the suit with watertight integrity and the equivalent protection of a dry suit. Constructed of a waterproof and breathable (moisture vapor permeable) fabric, this module's sleeve openings maintain watertight integrity with neoprene seals. The immersion module's (patent pending) neck seal is constructed of a waterproof, breathable polyurethane/polycarbonate-coated nylon stretch material and is closed via an adjustable, elastic drawstring system that effectively seals water outside the module and provides comfortable wear. Sock-type feet are integrated into the legs. The third module is the outer shell urethane-coated nylon shell which provides a durable water-resistant barrier to wind, sea spray and rain. This module is vented allowing the suit to breathe. The knee and seat portions of the outer shell are reinforced. An integral foam-lined hood provides protection both in and out of the water.

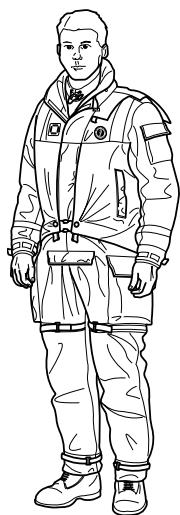


FIGURE 1
MSD900 Industrial
Immersion Work Suit



FIGURE 2
MSD900 Industrial Immersion Work Suit Layers

Maintenance and Repair

Maintenance is limited to cleaning the MSD900 and lubricating its waterproof zipper. Ensure that your Mustang product is completely dried before storing it in a dry, well-ventilated location. (Refer to Maintenance and Care instructions on page 11 for more information).

Inspection

Periodically examine your MSD900 for signs of abrasion or damage. Should a Mustang product require manufacturer's inspection, please contact your Mustang Survival dealer (refer to page 13 for inspection protocol).

Warranty

Mustang products are warranted to be free from defects in material and craftsmanship for a period of one year after date of purchase by the end user. Products which, in Mustang Survival's sole judgement, have received excessive or abusive use will not be covered by this warranty.

Contact

If you require more information on your Mustang product, please contact us at:

Mustang Survival, Inc.,
3870 Mustang Way,
Bellingham, WA 98226
TOLL FREE (800) 526-0532
TELEPHONE (360) 676-1782

WARNING

THE MSD900 SHOULD BE WORN WITH ALL THREE MODULES ASSEMBLED. THE MODULES ARE NOT DESIGNED TO BE WORN INDEPENDENTLY, AND A LOSS OF PROTECTION AND WEAR RESISTANCE WILL RESULT IF WORN IMPROPERLY.

Assembly

MSD900 Assembly Steps

STEP 1 Lay out the thermal liner and immersion module

- a) Lay out the thermal liner and the immersion module side by side in the same orientation as if you were going to wear them.

Note: Check the labels of the thermal liner to ensure that they are located on the inside (the seams of the thermal liner should face out).

- b) Make certain the neck seal adjustment on the immersion module is fully open and facing up. Make sure the waterproof zipper is fully opened.

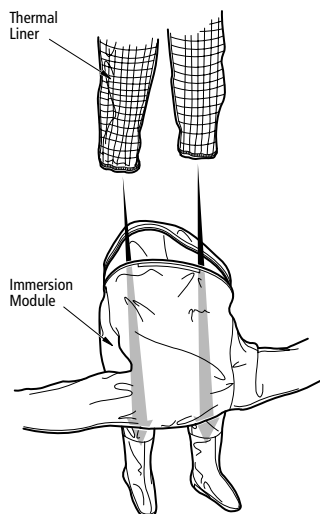


FIGURE 3
MSD900 Industrial
Immersion Work Suit Layers

STEP 2 Connect the thermal liner and the immersion module at the ankle

- a) Fold the top half of the immersion module over at the waist toward the legs. Ensure the lower portion of the module is exposed.
- b) Keeping the bottom flat and straight, use an overhand grasp to insert each leg of the thermal liner down into each leg of the immersion module until it reaches the interconnection zipper at the ankle (see fig. 3).

Note: Ensure the legs do not twist, maintaining a matching orientation during insertion.

- c) After pushing your hand down between the thermal liner and the immersion module, grab the thermal liner ankle zipper and the immersion module zipper.
- d) Pull both legs out together, turning them inside out to expose the zippers (see fig. 4).
- e) Attach the two ankle zippers. The immersion module zipper will only work in one direction (see fig. 5). Apply the same procedure to the other leg.
- f) Push the two legs completely down into the immersion module ensuring they are aligned.

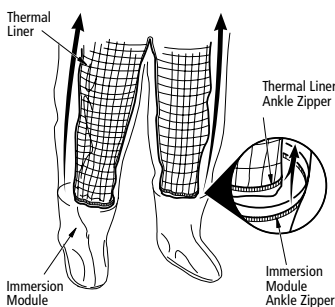


FIGURE 4
Pulling a Leg Out Exposing the Zipper

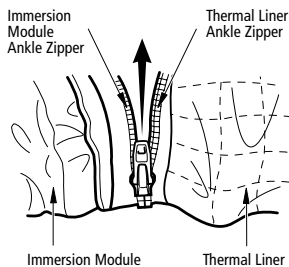


FIGURE 5
Thermal Liner and the Immersion Module
Connected at the Ankles

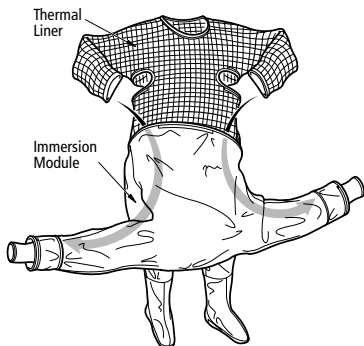


FIGURE 6

Insertion of the Thermal Liner Into the Arm of the Immersion Module

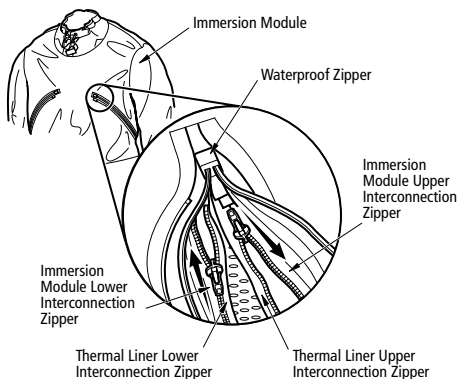


FIGURE 7

Closing the Lower Interconnection Zipper

STEP 3 Waist and waterproof zipper connection - Part I

- Return the immersion module to its laid out position in Step 1. Push the left arm of the thermal liner down to the end of the left arm of the immersion module (see fig. 6).
- Repeat this procedure with the right arm.
- To join these layers together, start at the end of the waterproof zipper underneath the left arm and close the length of the lower interconnection zipper (see fig. 7).
- Fold the two layers out and lay them flat.

STEP 4 Wrist connection

- Push your hand between the two layers down the left arm, grab the arms at the interconnection zippers and pull both arms through.
- Line up the zipper on the immersion module with the zipper on the cuff of the thermal liner and connect them (see fig. 8).
- Push the cuffs back through the arm to the normal position.
- Repeat this procedure for the right arm.

Note: Ensure the arms do not twist, maintaining a matching orientation during insertion.

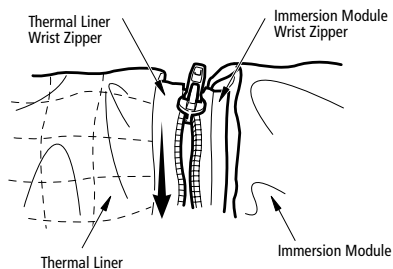


FIGURE 8
Thermal Liner and the Immersion Module
Connected at the Wrist

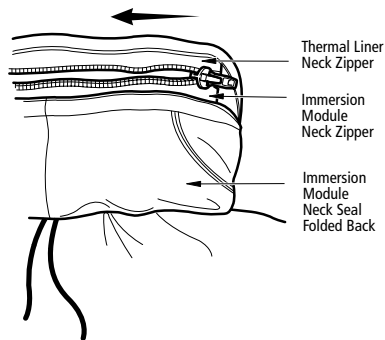


FIGURE 9
Connecting the Thermal Liner and the
Immersion Module at the Neck

STEP 5 Neck Connection

- a) Grab the edge of the neck seal on the immersion module and expose the interconnection zipper.
- b) Line up the end of the zipper on the immersion module with the end of the zipper on the thermal liner (see fig. 9).
- c) Fasten the zipper and continue to close until the two are completely joined, then fold the neck seal back down.

CAUTION

Avoid pinching the waterproof material of the immersion module with the zipper slider.

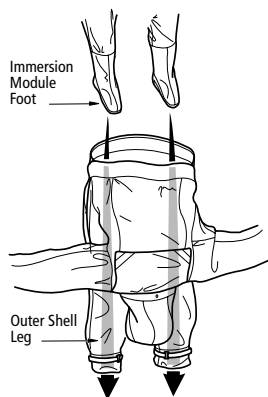


FIGURE 10

Leg of the Thermal Liner/Immersion Assembly Fed Through the Outer Shell

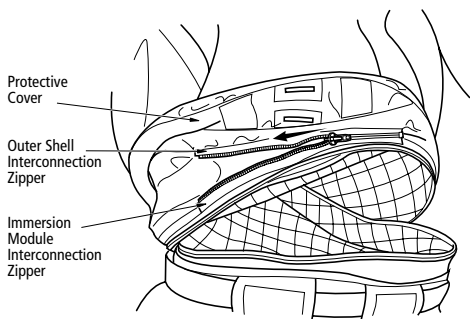


FIGURE 11

Closing the Upper Interconnection Zipper between Immersion Module and the Outer Shell

STEP 6 Waist and Waterproof Zipper Connection - Part II

- a) Complete the connection of the immersion module to the thermal liner by starting at the end of the interconnection zippers that are located at the end of the opened waterproof zipper. Close the length of the upper interconnection zipper (see fig. 7).
- b) Lay the modules out flat.

STEP 7 Adding the outer shell

- a) Lay the outer shell out flat with the chest zipper facing up. Lower the chest and ankle gusset zippers. Completely loosen the wrist adjustment straps.
- b) Fold the outer shell over at the waist exposing leg openings.
- c) Feed the left leg of the thermal liner/immersion module assembly through the left leg of the outer shell and pull it through. Repeat this procedure for the right leg (see fig. 10).
- d) Feed the left arm of the assembly through the left arm of the outer shell and pull it through. Repeat this procedure for the right arm. Do not connect the wrist interconnection zippers yet.
- e) Pull the neck seal up to the neck of the outer shell.

STEP 8 Outer shell waist and waterproof zipper connection

- Fold back the protective flaps of the outer shell to give access to the interconnection zippers.
- Line up the two ends of the bottom interconnection zipper on the immersion module with the corresponding zipper of the outer shell. Connect the two ends and fasten them the length of the zipper (see fig. 11).
- Line up the two ends of the top interconnection zipper on the immersion module with the corresponding zipper of the outer shell. Connect the two ends and fasten them the length of the zipper.
- Lay the suit out flat.

STEP 9 Outer shell wrist connection

- Fold back the left wrist of the outer shell exposing the interconnection zipper.
- Line up the zipper with the neoprene wrist zipper and connect the two securely (see fig. 12).
- Fold the wrist of the outer shell back over to cover the interconnection zipper.
- Repeat this procedure for the right wrist.

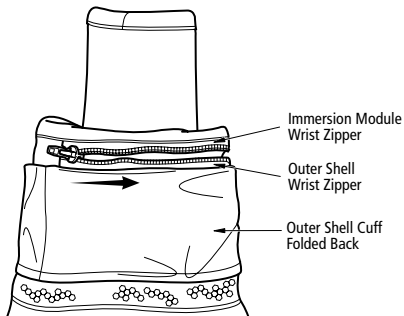


FIGURE 12

Connecting the Immersion Module and the Outer Shell at the Wrist

WARNING

THE MSD900 SHOULD BE WORN WITH ALL THREE MODULES ASSEMBLED. THE MODULES ARE NOT DESIGNED TO BE WORN INDEPENDENTLY, AND A LOSS OF PROTECTION AND WEAR RESISTANCE WILL RESULT IF WORN IMPROPERLY.

Donning

STEP 1 Suit preparation prior to donning

- a) Loosen the neck seal completely
- b) Ensure that the wrist, thigh and ankle adjustment straps are fully loosened.
- c) Make sure that the chest zipper is fully opened.
- d) Lower and fold back the chest ventilation zippers to expose the waterproof zipper. (refer to page 9 for regular zipper maintenance)
- e) Fully open the waterproof zipper.

CAUTION

USE EXTREME CAUTION WHEN DONNING THE MSD900. PRIOR TO DONNING THE MSD900, REMOVE ALL RINGS, WATCHES, EARRINGS, NECKLACES AND EYEGLASSES THAT WILL CAUSE DAMAGE TO WRIST AND NECK SEALS.

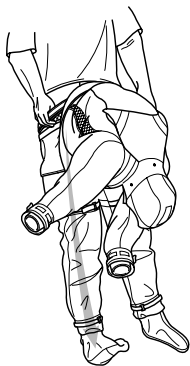


FIGURE 13
Inserting Legs Into the MSD900
Industrial Immersion Work Suit



FIGURE 14
Donning the MSD900 Industrial
Immersion Work Suit

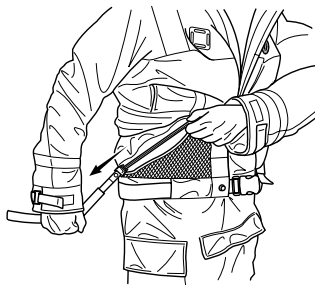


FIGURE 15
Pulling the Zipper to
Close the Suit

STEP 2 Donning Instructions

- a) Pick up the MSD900 and fold the top over forwards at the waist.
- b) Slowly slide your legs in until your toes reach the end of the socks (see fig. 13).
- c) Insert the left arm fully. Then simultaneously insert the right arm and head. Gently pull the neck seal over your head (see fig. 14).

STEP 3 Closing the waterproof zipper

- a) Fold the protective cover away to expose the waterproof zipper.
- b) Grasping the open end of the waterproof zipper with your left hand, begin pulling the zipper slider with your right hand, continuing to close the waterproof zipper as far as you can (see fig. 15).
- c) Switch hands and with your left hand grasp the zipper slider and continue closing the waterproof zipper until it is completely closed while holding the suit with your right hand to gain leverage.

WARNING

Failure to completely close the waterproof entry zipper and the relief zipper will result in leakage of water inside the suit and reduction in survival time when in the water. Have a fellow crew member double all each slide fastener to ensure they are completely closed against their sealing plugs.

- d) Unfold the protective cover over the waterproof zipper and snap it in place at the ends. Adjust the chest ventilation zippers on the outer shell.

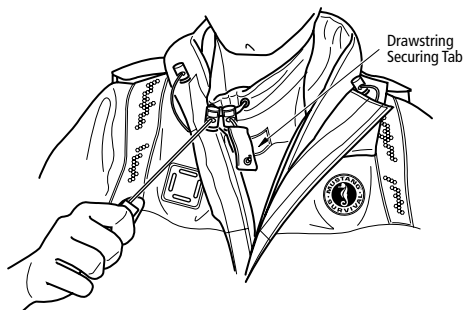


FIGURE 16
Adjusting the Neck Seal

STEP 4 Adjusting the MSD900 after donning.

- a) Adjust the neck seal to a snug but comfortable fit. Do not tighten the neck seal to the point where it is uncomfortable (see fig. 16).
- b) Secure the ends of the neck seal drawstring to the tab located at the outer edge of the neck seal.
- c) Close and adjust the outer shell waist belt.
- d) Adjust the ankle, thigh and wrist straps.

Securing The MSD900 In Emergency Situations

1. **General** - In the event of immersion, the MSD900 has a number of emergency features that are crucial to your survival.
2. **Neck Seal** - After entering the water, tighten the neck seal by grasping the drawstrings and pulling the tabs out and away from the neck until a snug, comfortable fit is achieved.
3. **Wrist Seals** - The neoprene wrist seals will prevent the entry of water into the suit. Tightening the wrist closures will improve the watertight integrity of the wrist seals.
4. **Hood** - The hood, if not deployed already, can be removed from its stowed position. Tighten the drawstrings on both sides of the hood to secure it about the face.

Doffing Procedure

The following procedure is for removing MSD900:

- a) Remove all other equipment donned over the MSD900 before proceeding.
- b) Wash down the MSD900 while wearing it paying particular attention to entry and relief slide fasteners. Remove all traces of salt.
- c) Unbuckle the waist belt and release the ankle, wrist and thigh adjustment straps.

CAUTION

FAILURE TO COMPLETELY OPEN THE WATERPROOF ZIPPER WILL DAMAGE THE SUIT WHEN IT IS REMOVED.

- d) Fold the waterproof zipper cover out of the way. Completely open the waterproof zipper.
- e) Completely loosen the neck seal drawstring and open the chest zipper.
- f) Insert fingers between neck seal and neck. Gently stretch the seal outward and upward while pulling head out of the suit.
- g) Insert two fingers under wrist seal and gently pull seal outward. Cup the hand, fingertips and thumb together, and gently pull hand from seal. Repeat for other hand.
- h) Remove legs from suit. Hang the suit by the hanging loop, close waterproof zipper half way and allow to hang until dry.

Maintenance And Care

1. General

After use and immersion in water (other than fresh clean water), the suit modules should be either washed or rinsed separately. To increase the life of the garment, it is recommended to wash the suit only when required. For spot cleaning of the exterior when assembled, hand wash the suit in fresh water (100°F or less) using a mild powdered soap solution, then hang to air dry.

WARNING

Do not hang the suit by the neck seal. Use a wooden hanger and support the suit by the outer shell, using the hanging loop located inside the outer shell neck area to secure the suit while drying. Do not use bleach or other chlorine products. Do not use liquid soaps or fabric softeners. Do not dry clean. Ensure all pockets are emptied and layers have been separated.

Note: *Unzip all interconnection zippers before laundering.*

Separating the layers

- a) Roll back the outer shell wrist material approximately 3 inches to expose the wrist interconnection zipper,
- b) unzip interconnection wrist zippers
- c) Repeat steps (a) and (b) for the opposite wrist.
- d) Fold open the outer shell around the waist to expose the upper and lower waist interconnection zippers.
- e) Unzip the upper zipper in the center of the back.
- f) Unzip the lower zipper to completely disconnect the outer shell from the immersion module.
- g) Remove the outer shell from the immersion module.
- h) Completely loosen the neck seal drawstring.
- i) Roll back the neck seal exposing the neck thermal lining interconnection zipper.

- j) Unzip the neck thermal lining interconnection zipper.
- k) Unzip the waterproof zipper around the waist circumference and fold the suit open to expose the upper and lower waist interconnection zippers.
- l) Unzip the upper and lower waist interconnection zippers.
- m) Unzip the upper and lower interconnection zippers adjacent to the waterproof relief zipper.
- n) Reach between the immersion module and thermal liner to the wrist and pull the wrist cuff through (inside out) exposing the interconnection zipper.
- o) Unzip the wrist interconnection zipper.
- p) Repeat steps n) and o) for opposite wrist.
- q) Reach between the immersion module and thermal liner to the ankle and pull the ankle cuff through inside out exposing the ankle interconnection zipper.
- r) Unzip the ankle interconnection zipper.
- s) Repeat steps q) and r) for opposite ankle.

2. Outer shell

- a) Empty contents from all pockets.
- b) Close all vent and pocket zippers prior to washing outer shell
- c) Unsnap and fold open the hood.
- d) Remove the inflatable pillow from the suit (see fig. 17).
- e) Machine wash in warm water (100°F) using mild powdered soap.
- f) Hang the outer shell to air dry.
- g) Outer Shell may be tumble-dried on a low heat setting.
- h) Upon drying, replace the inflatable pillow in the suit.

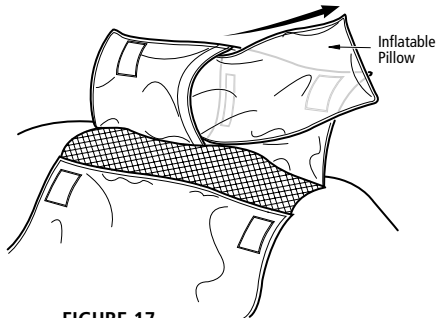


FIGURE 17

3. Immersion module

- Machine wash in warm water (100°F) using mild powdered soap.
- Hang the outer shell to air dry.
- Immersion module may be tumble-dried on a low heat setting.
- Zipper cleaning is the first step to zipper longevity. Clean the zipper of any mud, sand, salt or foreign elements. First, use warm soapy water to remove any heavy deposits and then use one of the recommended cleaning fluids listed in the chart below. Finally, apply a recommended wax for easy zipper movement.

CARE PRODUCT	PRODUCT NAME	SUPPLIER
Cleaning Fluid	Zippy Cool	YKK USA
	Zip Care	McNett
	BDM Fluid	BDM UK
Lubricating Wax	Zippy Cool	YKK USA
	Zip Wax	McNett
	BDM Wax	BDM UK

4. Thermal Liner

- Wash by hand in warm water using a mild powdered soap.
- Rinse thoroughly in clean water.
- Hang to air dry.

Note: *Ensure that the outer shell, immersion module and thermal liner are completely dry before reassemble.*

Inspection

General Suit Examination

Periodically examine your MSD900 for visual signs of abrasion or damage. Lay the suit out on a clean, flat surface. Make sure that the suit is dry inside and out. Visually check for small rips, tears, or punctures that can be repaired by a suitable repair station*. Major rips, tears, or punctures should be referred to Mustang Survival for inspection and repair.

*Contact Mustang Survival Corp. for more information.

Outer Shell

Inspect the outer shell over its entire surface area for cuts, tears and seam separations. Any damage found should be repaired prior to further use.

Head Pillow

Check inflatable head support for damage and ensure that it is properly attached. Check inflation hose(s) for deterioration or leaks. The head support/buoyancy ring should be inflated and tested for leaks at least every three months:

- a) Inflate the bladder, then immerse it in water and check for bubbles. (Ensure that the suit is completely dry inside and out before returning it to its bag.)
- b) Inflate the bladder, let it stand for 24 hours and then check it for firmness. Minor leaks can be repaired by a suitable repair station using aquaseal adhesive. Major leaks should be evaluated and repaired by Mustang Survival.

Retroreflective Tape

Check retroreflective tape for condition and adhesion. Replace if necessary. For best adhesion, repair should be completed by a suitable repair station or sent back to Mustang Survival.

Immersion Module

Inspect the immersion module over its entire surface area for cuts, tears and seam tape separations. Return the immersion module to Mustang Survival for repairs or replacement.

Zipper

Check for ease of zipper operation by sliding it up and down. Using lubricant recommended by Mustang Survival (see page 13), lubricate the front and back of the zipper and the slide fastener. If the zipper is not functional, the suit must be removed from service and discarded or returned to Mustang Survival for repair.

Thermal Liner

Inspect the thermal liner over its entire surface area for cuts, tears and seam separations. Any damage found should be repaired prior to further use.



WE SAVE LIVES FOR A LIVING

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