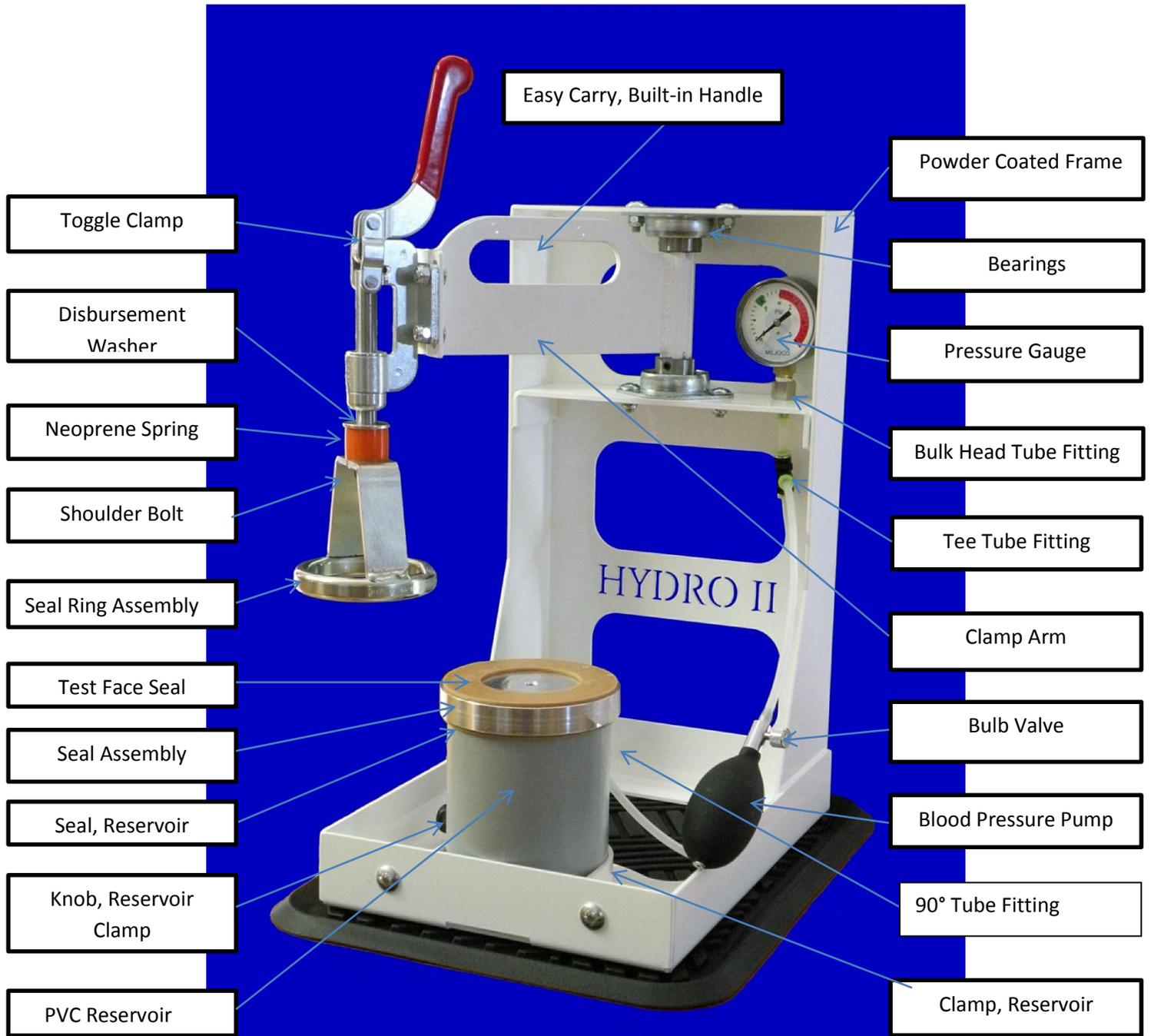


# Operating Instructions



## HYDRO II®

Patent # 8,281,644

# Operating Instructions



## 1. Set Up

- a. Place the spill-over tray on stable, water-resistant, tabletop surface.
- b. Place the Test Stand in spill-over tray.



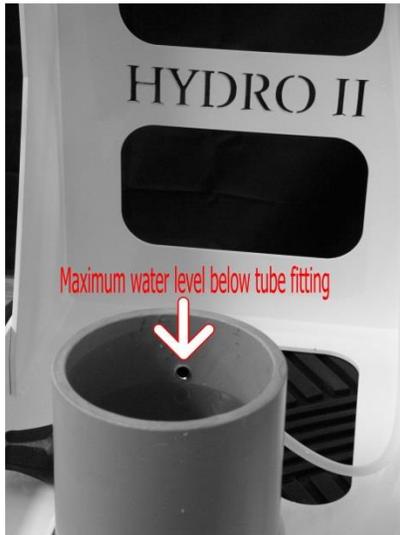
## 2. Fill the reservoir

- a. Raise the clamp handle to a full, open position.
  - **Warning:** The clamp is latched under spring tension.
  - The handle will open quickly when tension is released.
- b. Move the clamp arm to the left or right to provide clear access to the test pedestal



- c. Remove the gasket assembly from the pedestal / water reservoir  
by lifting it up and out of the reservoir. Set it aside for later replacement.

# Operating Instructions



- d. Fill the reservoir with clean water, filling to a point just below the tube fitting, located in the side of the reservoir.



- e. Replace the gasket assembly. Make sure the reservoir gasket and feed tube are not damaged. And, make sure that the gasket assembly is resting evenly on top of the



### 3. Garment Position

- a. Select the area of the garment to be tested and position it over the top of the pedestal / test face. Smooth out any folds or wrinkles.
  - **Note:** For NFPA CODE 1851 testing, it is important that the cloth side of the moisture barrier or the side that faces the outer shell (test item) be placed face-down against the rubber gasket.

# Operating Instructions



- b. Swing the clamp arm back into position directly over the test area. Lower the clamp gently until the seal ring is resting on the garment. Make sure it is centered over the test area.



- c. Engage the clamp by forcing the clamp handle in a downward direction until it latches in position.



## 4. Hydrostatic Pressure

- a. Close the valve on the pressure bulb, turning clockwise and being careful not to over-tighten the valve.
- b. Monitor the gauge as you compress and release the bulb to form the hydrostatic pressure of 1 psi on the test item. Slight pressure adjustments might be required as the seals seat. Over pressure can be relieved by slightly opening and closing the bulb valve. Caution: Over-pressurization can damage the test item.

# Operating Instructions



**Note:** For NFPA CODE 1851 testing, hydrostatic test pressure is one (1) PSI.



## 5. Inspect for Leaks

- a. View the test area inside the seal ring for water leaks and seepage.



## 6. Identify Leaks

- a. Mark any leaks so they can be identified later. **Note the leak on test worksheet.**
- b. Maintain the hydrostatic pressure in accordance with your test parameters.
  - i. **Note:** For NFPA Code 1851 testing, hydrostatic test pressure of one PSI must be maintained for fifteen

# Operating Instructions

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- c. To release the hydrostatic pressure, open the bulb valve.
- d. Disengage the clamp to the full open position.  
Remember: The clamp is latched under spring tension.
- e. Swing the clamp arm to one side (left or right) to obtain full access to the test area.
- f. Remove the garment or reposition for an additional test.
- g. Repeat the previous steps to for additional checks.

## Storing or Transporting the HYDRO II

With the small foot print and built in handle it is easily stored or transported between stations. It is recommend that the reservoir be empty while not in use.

### To empty the reservoir

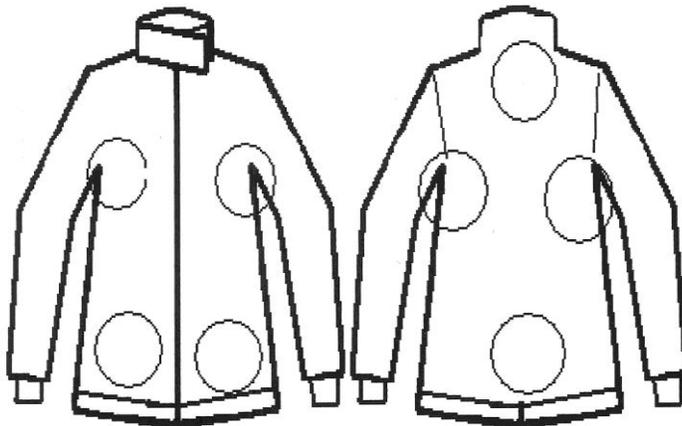
- Remove the gasket assembly as shown above.
- Loosen the reservoir clamp by turning the clamp nut counter clockwise several turns to loosen the clamp. Lift the reservoir out and pour water into a container for disposal.
- Replace reservoir making sure the tube fitting is facing the back and reservoir is in position, tighten clamp nut being careful to not over tighten.
- Replace gasket assembly.

# Operating Instructions

## Sample Test Worksheet

Uniform Data		
Fire Department		Test Date
Firefighter Name		ID
Unit Serial Number		Inspected By
Manufacturer		Mfg Date

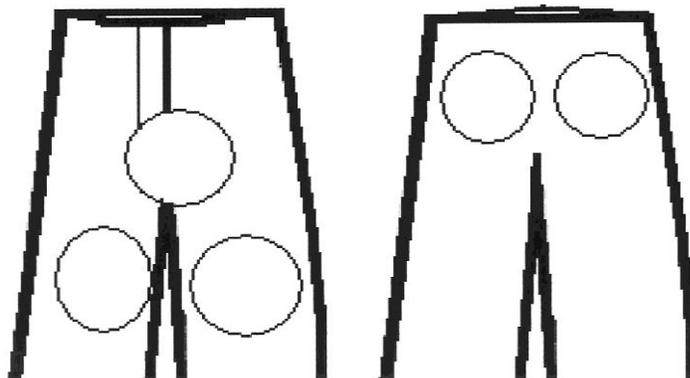
Hydrostatic Test						
COAT	Passed	<input type="checkbox"/>	Failed	<input type="checkbox"/>	Recommend to Retire	<input type="checkbox"/>
PANTS	Passed	<input type="checkbox"/>	Failed	<input type="checkbox"/>	Recommend to Retire	<input type="checkbox"/>



PANTS

PASSED

FAILED



- 1 = DROPLETS
- 2 = ENTIRE AREA
- 3 = SEAM FAILURE
- 4 = OTHER - Specify

Notes:

- 1 = DROPLETS
- 2 = ENTIRE AREA
- 3 = SEAM FAILURE
- 4 = OTHER - Specify

Notes:

# Operating Instructions

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## Warranty Information

Keep this portion for your records.

### **Limited Warranty**

FUNCTIONAL IDEAS warrants this item to be free from manufacturing defects and workmanship, and to perform under normal use, for a period of one (1) year from the date of purchase. The warranty is limited to the repair or replacement of any defective units and is effective only if such units are returned with the sales receipt within one (1) year after the purchase date. There are no warranties that extend beyond the description on the face hereof.

Products should be returned in secure packaging with a detailed explanation of the problem requiring service and a copy of your bill of sale.

S/N \_\_\_\_\_ DATE OF PURCHASE \_\_\_\_\_