

Guidance for the Operation of Lifeboat & Walkway Load Test Kits

JWA Lifeboat & Walkway Load Test bags are used as static, surface loading weights to establish the safety of Lifeboats and Walkways. They are manufactured to the same high standard as our world renowned Water Weight Load Test Bags.

The requirement for Lifeboat Load testing is legally directed by the International Convention for the Safety of Life at Sea (SOLAS) Regulation 20/MSC.402 6.3.1 which states:



The five-year operational test of the winches of the launching appliances shall be carried out with a proof load equal to 1.1 times the weight of the survival craft or rescue boat and its full complement of persons and equipment.

This test is conducted by loading to 110% of safe working load (SWL) followed by a dynamic brake test (lowering and abruptly stopping).

The testing of walkways falls under the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER). This applies if the walkway is part of a lifting operation or used as work equipment.

Given that the test for lifeboats is a dynamic drop test, the possibility that the item under test will fail should be addressed in the risk assessment and lift plan. The use of JWA Lifeboat & Walkway Load Test kits allows for the remote filling and emptying of the bags, so removing the risk of injury due to the failure of winches and rigging.

These Guidance notes assume that the kit in use has been inspected by a competent person in accordance with JWA definitions and is in a complete and fit for use condition. While JW Automarine is a leader in the development and production of these products, the guidance detailed here should always be seen as a starting point for safe use.

For information about servicing and inspection contact sales@jwautomarine.com

Pre-Use Requirement & Checks

1. Ensure that the following is available on site:
 - a. A flowmeter to accurately measure the water load being pumped in.
 - b. A water supply to fill the complete set of bags (375 litres for each bag) with 2" Hosetail Cam Coupling.
 - c. Drainage for the above water.
 - d. A compressed air supply to power the water pump (maximum 120 p.s.i./ 8.3 bar) with a 1" Crowsfoot Dixon coupling.
 - e. The LB kits RECORD OF THOROUGH EXAMINATION OF LIFTING PLANT & EQUIPMENT.

Note - The pump supplied with the LB kit is only for pumping out, not filling.

2. Before commencing, check that the kit has not been damaged in transit, then check the contents of the LB kit against the Record (the list below is a complete standard kit)
 - 16 x 375kg Lifeboat Bags
 - 1 x air powered water pump
 - 1 x 30m pump air supply hose (2 x 1" Crowsfoot Dixon couplings)
 - 1 x 16 branch filling manifold (1 x 2½" Male British Instantaneous & 1 x 2" Hosetail Cam couplings)
 - 16 x filling hoses (manifold to bags)
 - o 3.5m x 4
 - o 4.0m x 4
 - o 5.0m x 4
 - o 6.0m x 4
 - 1 x 2m rigid pump out hose (2 x 2" Female Hosetail Cam couplings)
 - 1 x 3m pump out hose (2½" Std Layflat Fire Hose)

Note - calculate the required number of bags to meet the load requirement

3. Check the workspace for snags, trips hazard and obstructions, to prevent injury to personnel or damage to equipment.
4. Ensure that the lifeboat safety lines and all other relevant safety measures are in place.

Setup and Filling

1. Load the 375kg bags into the lifeboat, starting from the opposite side to the entry door and working from bow to stern. Load the keel area first, then the seated area.
2. Load the bags keeping all the filling valves on the top of the bag and to the centre of the lifeboat. If loading a seat area, secure each bag as you load them.
3. Attach a filling hose to each bag as you load them and pass the hose tails out through the entry door. Hoses are supplied at different lengths to assist with filling.
4. The hose tails should now be connected to the manifold, ensuring all cam locks have correctly closed.

Note – close any valves that do not have hoses connected.

5. Connect the water supply to the manifold via the 2½" Male British Instantaneous coupling.
6. Check all connections before commencing filling.
7. When a bag is full, a relief valve will open. Close the feed to that bag and monitor the other bags until all the bags are full.

Note – if the load required is less than the total of the fully filled bags, a flow meter can be used to accurately fill to the required volume

8. Once the required load has been achieved, the manifold valves should be closed and the water supply can be removed.
9. The manifold and connected hoses should now be placed inside the lifeboat.

Safety Note – ensure that all hoses and equipment not connected to the manifold are clear of the door

10. The lifeboat test process can now be undertaken.

Emptying

1. Once the test is complete, check that the lifeboat is secured and safe before the bags are discharged.
2. Move the manifold back out of the boat.
3. The pump should now be placed in proximity to the manifold and connected as follows:
 - a. Connect the 2m suction hose with 2" Female Hosetail Cam couplings to the manifold suction side and to the pump inlet side.
 - b. Attach the 3m discharge hose 2½" Female British Instantaneous to the pump outlet side
 - c. Check that the discharge area is clear.
 - d. Open all the valves on the Manifold that have bag hoses connected.
 - e. Fit and secure the air hose 1" Crowsfoot Dixon couplings to the pump, check all connections and that the discharge area is still clear.
 - f. Connect the 1" Crowsfoot Dixon coupling to the air supply and open the air supply.
 - g. Check that the pump is discharging, then run until all the bags have emptied.
 - h. Once the bags are empty, turn of the air supply to the pump.
 - i. Now disconnect and remove the hoses, manifold and bags.



Safety Note – Check that the lifeboat is properly secured before entering to remove equipment.

4. Remove and roll all the bags and hoses and place back in the correct storage box, along with all other equipment.