

LANTEC	Service Bulletin	40090
Drum Brake Test Procedure		Page 1 of 3

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Product Scope:

LANTEC LH Series Hoists equipped with Drum Brakes in service on an Offshore API Spec 2C Crane

Bulletin Scope:


LANTEC LH Series Hoists are rated for Personnel Handling only if the hoist is an integral part of an Offshore Crane carrying a valid API Spec 2C nameplate, and if other conditions are met. See LANTEC Sales Bulletin 50010 "Personnel Handling Statement", available upon request.

API Recommended Practice 2D Section appendix C.4.1.2d.22 and LANTEC require that hoist brakes are tested.

This bulletin states the procedure for testing the Spring-set Drum Brake in the Hoist.

Advice:

Brake Test Procedure

 WARNING
<p>This procedure must be followed exactly in the order prescribed. Any deviation from this procedure could cause a condition where control of the load is lost, which could result in property damage, personal injury or death.</p>

Description

Using this procedure the Drum Brake is tested by applying torque from the hydraulic motor against the fully set brake.

Apparatus

The hoist comes fitted with all the required items for performing this test, except for a JIC-6 male plug and tools.

Brake test procedure:**Step 1 - Unload the Hoist**

This test must be performed with NO LOAD on the hoist. The wire rope, block, and hook weight is acceptable. For the boom hoist the boom must be stowed so that the hoist is unloaded.

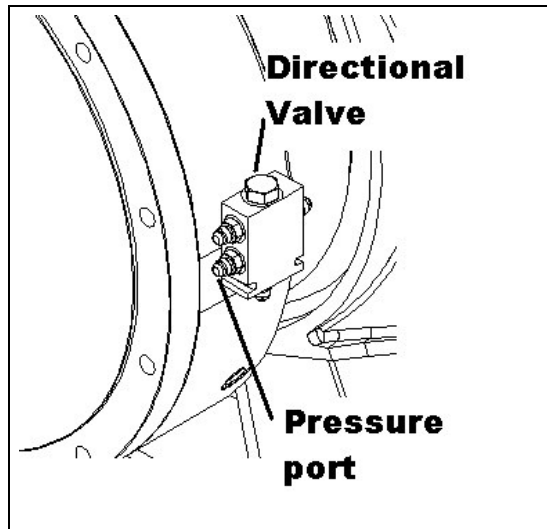
Step 2 - Disengage Ratchet & Pawl Mechanism**! WARNING**

The hoist must be unloaded prior to executing this procedure. Any deviation from this procedure could cause a condition where control of the load is lost, which could result in property damage, personal injury or death.

If the hoist is equipped with a Ratchet and Pawl mechanism, disengage the pawl from the ratchet wheel by disconnecting the pawl cylinder and rotating the pawl clear of the ratchet wheel. (If this is not done then there is a potential that the brake may not be properly tested.)

Step 3 - Identify Directional Valve

- a. Identify the Directional Valve mounted on the Drum Brake Housing.

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Step 4 - Remove Pressure Line

- a. Remove the pressure line to the directional valve and plug the line with a JIC-6 male plug. (See image above)

Step 5 - Power Down With the Hydraulic Motor

- a. With the hydraulic power unit running, move the directional control valve handle to the full-open lowering position.
- b. Increase the engine speed, if necessary, to bring system pressure up to the relief valve setting. The hoist drum should remain stationary.
- c. If the drum rotates, the hoist must be removed from service and inspected.
- d. Refer to LANTEC Operations & Maintenance manual for brake inspection and repair procedure.
- e. Once the inspection and/or repair is complete, the Brake Test must be repeated prior to returning the hoist to service.

Step 6 - Return Hoist to Normal Operating Condition

When testing is complete, return the hoist to its normal operating condition by following these steps:

- a. Re-install the pressure line to the directional valve.
- b. If the hoist is equipped with a Ratchet and Pawl mechanism, reconnect the pawl cylinder and check the pawl for proper engagement with the ratchet wheel.

Step 7 - Operate the Hoist to Confirm Proper Function

Operate the hoist in both directions to ensure proper hoist function.

Inspection Records:

Crane inspection reports as well as records of tests, repairs, and modifications to hoists should be available and accessible for two years. These records should include, but not be limited to, hoist model and serial number, name and employer of repair/inspection technician, date and description of repair and functional test reports.

End of Bulletin

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