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|  | **Exact Valve Solutions** | **SOP #:** | ELB-120 |
| **Revision #:** | 0 |
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| **SOP Owner:** | D. Mckim | **Approval:** |  |

**Standard Operating Procedure – Hydraulic Actuator Function test**

# Purpose

This document details Exact Valve Solutions’ Hydraulic Actuator function.

# Scope

It is important to test the minimum working pressure and maximum working pressure of a hydraulic actuator to make sure it is functioning properly.

# Prerequisites

A visual inspection must be done to all equipment prior to pressure testing to access any defects that may make pressure testing unsafe. Before testing it is imperative to know the manufactures capacity.

# Responsibilities

Hydraulic actuator testing will only be done by designated personnel that have been trained in the full use of the testing equipment and have a good general knowledge of the equipment being tested.

# Procedure

* 1. Check accumulator to make sure it is in good working condition
	2. Turn accumulator on and make sure accumulator shuts off at 3,000 psi (accumulator pressure) and 1,000 psi (manifold pressure).
	3. Bleed off accumulator (manifold pressure only)
	4. Hook up hydraulic hoses to the actuator on the valve
	5. Increase manifold pressure until the valve will cycle fully open and closed.
	6. Open and close the valve at least 10 times to assure everything is operating properly. While doing so listen closely to be sure the actuator is not making any awkward noises or leaking hydraulic fluid from the actuator or the fittings.
	7. Find the lowest operating pressure to operate actuator on the accumulator and record it on router.

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* 1. Check the manufacturers rating to make sure the valve is within their criteria.
	2. Increase the manifold pressure to 1,500 psi.
	3. Operate the valve open and hold for five minutes to assure there is no leaks or loss of pressure.
	4. Then operate the actuator closed and do the same.
	5. Make sure there is no pressure bleed off during the holding period.
	6. If the valve is in satisfactory condition, bleed the pressure off the accumulator and hoses.
	7. Role up the hydraulic hoses to prevent a potential tripping hazard

# References

Manufacturers Manual ELB-113 Router Form