PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

Calspan LLC

4455 Genesee Street, Buffalo, NY 14225

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system
(as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Mechanical Calibration

(As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen
President

Perry Johnson Laboratory Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

Initial Accreditation Date:	*Issue Date:*	*Expiration Date:*
July 17, 2013	August 13, 2024	November 30, 2026

Accreditation No.:	*Certificate No.:*
76654	L24-617

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjlabs.com

Certificate of Accreditation: Supplement

Calspan LLC
4455 Genesee Street, Buffalo, NY 14225
Contact Name: Daryl Wiese Phone: 716-631-6769

Accreditation is granted to the facility to perform the following calibration:

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED
Load Cells – Force [F]	5 lbf to 100 lbf	0.15 % of Reading	Force Application Frame and Reference Load cell	SAE J2570 SAE J211 WI-ATD-AC-009
	101 lbf to 200 lbf	0.14 % of Reading		
	201 lbf to 400 lbf	0.13 % of Reading		
	401 lbf to 700 lbf			
	701 lbf to 1 000 lbf			
	1 001 lbf to 2 000 lbf			
	2 001 lbf to 4 000 lbf			
	4 001 lbf to 7 000 lbf			
	7 001 lbf to 10 000 lbf			
Load Cells – Moment [F]	5 lbf to 100 lbf	0.15 % of Reading	Moment Applications of Force and 1” Moment Arm with Reference Load Cell	
	101 lbf to 200 lbf	0.14 % of Reading		
	201 lbf to 400 lbf	0.13 % of Reading		
	401 lbf to 700 lbf			
	701 lbf to 1 000 lbf			
	1 001 lbf to 2 000 lbf			
	2 001 lbf to 4 000 lbf			
	4 001 lbf to 7 000 lbf			
	7 001 lbf to 10 000 lbf			
Accelerometers [F]	5 Hz to 9 Hz	1.8 % of Reading	Comparison System Using Shaker and Accelerometers	SAE J2570 SAE J211 WI-ATD-AC-008
	10 Hz to 99 Hz	1.3 % of Reading		
	100 Hz	0.89 % of Reading		
	101 Hz to 920 Hz	1.1 % of Reading		
	921 Hz to 5 000 Hz	1.5 % of Reading		
	5001 Hz to 10 000 Hz	2 % of Reading		
	10 000 Hz to 15 000 Hz	2.3 % of Reading		

1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represents the smallest measurement uncertainty attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is typically expressed at a confidence level of 95 % using a coverage factor *k* (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.

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Accreditation is granted to the facility to perform the following calibration:

2. The laboratories range of calibration capability for all disciplines for which they are accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity.

3. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location.

4. Measurement uncertainties obtained for calibrations performed at customer sites can be expected to be larger than the measurement uncertainties obtained at the laboratories fixed location for similar calibrations. This is due to the effects of transportation of the standards and equipment and upon environmental conditions at the customer site which are typically not controlled as closely as at the laboratories fixed location