



Accredited Laboratory

A2LA has accredited

JOHN DEERE ELECTRONIC SOLUTIONS

Fargo, ND

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 20th day of June 2018.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 3010.02
Valid to June 30, 2020

For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

JOHN DEERE ELECTRONIC SOLUTIONS

4101 19th Ave North
Fargo, ND 58102

Trevor Gilles (GillesTrevorR@johndeere.com) Phone 701 552 8841
Jay Mosbrucker (MosbruckerJayA@johndeere.com) Phone 701 552 8602

MECHANICAL

Valid to: June 30, 2020

Certificate Number: 3010.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above, *as well as the satellite laboratory location listed below*, to perform the following tests on the following products or types of products: Electronic Controllers (Engines, Transmissions, Vehicle Electronics), Electronic Displays (LCD Display Modules) and Electronic Communication Gateways for Vehicles.

Test Technology:

Test Method(s):

Salt Spray & Corrosion Resistance

SAE J1455, Section 4.3 (Salt Spray Atmosphere);
JDQ 53.3 (2005), Section 4.1;
JDQ 53.3 (2011), Section 4.1;
JDQ 201B1 (2013, 2015, 2018)

Chemical Resistance

JDQ 53.3 (2005), Section 4.3 Level 3;
SAE J1455, Section 4.4;
JDQ 53.3 (2011), Section 4.3 Level 3;
JDQ 201B4 (2013, 2015, 2018)

Ultra Violet Resistance

JDQ 53.3 (2005), Section 8.1.1;
JDQ 53.3 (2011), Section 8.1.1;
JDQ 201G1 (2013, 2015, 2018)

Vibration

SAE J1455, Section 4.10 (Mechanical Vibration);
JDQ 53.3 (2005), Sections 6.1.1 and 6.1.2;
JDQ 53.3 (2011), Sections 6.1.1 and 6.1.2;
JDQ 201D1, JDQ 201D2, JDQ 201D3, JDQ 201D4,
JDQ 201D5 (2013, 2015, 2018)

Humidity

SAE J1455, Section 4.2 (Humidity);
JDQ 53.3 (2005), Section 7.3;
JDQ 53.3 (2011), Section 7.3;
JDQ 201F4 (2013, 2015, 2018)

Water Resistance

JDQ 53.3 (2005), Sections 4.2 and 4.4;
JDQ 53.3 (2011), Sections 4.2 and 4.4;
JDQ 201B2, JDQ 201B3, JDQ 201B5 (2013, 2015,
2018)

Test Technology:

Test Method(s):

Temperature Exposure

SAE J1455, Section 4.1.3.1 (Temperature Cycle Test);
SAE J1455, Section 4.1.3.3 (Thermal Stress);
JDQ 53.3 (2005), Sections 7.1 and 7.2;
JDQ 53.3 (2011), Sections 7.1 and 7.2;
JDQ 201F1, JDQ 201F2, JDQ 201F3 (2013, 2015, 2018)

Dust

SAE J1455, Sections 4.7;
JDQ 53.3 (2005), Sections 3.1, 3.2;
JDQ 53.3 (2011), Sections 3.1, 3.2;
JDQ 201A1; JDQ 201A2 (2013, 2015, 2018)

Particle Impact

SAE J1455, Section 4.8 ;
JDQ 53.3 (2005), Section 3.3;
JDQ 53.3 (2011), Section 3.3;
JDQ 201A3;

Shock

JDQ 53.3 (2005), Section 6.2;
JDQ 53.3 (2011), Section 6.2;
JDQ 201E1 (2013, 2015, 2018)

Drop

JDQ 53.3 (2005), Sections 6.3.1, 6.3.2, 6.3.3;
JDQ 53.3 (2011), Sections 6.3.1, 6.3.2, 6.3.3;
JDQ201E2; JDQ 201E3; JDQ 201E4 (2013, 2015, 2018)

¹This accreditation covers testing performed at the main laboratory listed above, and the satellite laboratory listed below.

1750 NDSU Research Park Drive
Fargo, ND 58102

Test Technology:

Test Method(s):

Thermal Shock

SAE J1455, Section 4.1.3.2 (Thermal Shock);
JDQ 53.3 (2005), Section 7.4;
JDQ 53.3 (2011), Section 7.4;
JDQ 201F5 (2013, 2015, 2018)

Temperature Exposure

SAE J1455, Section 4.1.3.1 (Temperature Cycle Test);
SAE J1455, Section 4.1.3.3 (Thermal Stress);
JDQ 53.3 (2005), Section 7.2;
JDQ 53.3 (2011), Section 7.2;
JDQ 201F2, JDQ 201F3 (2013, 2015, 2018)

Halt

JDQ 201H1 (2015, 2018)