



SURFACE VEHICLE RECOMMENDED PRACTICE

J3010™

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Registration and Conformity Assessment Process
for Passenger Cars and Light Trucks Wheels

RATIONALE

This technical report is stabilized because the technical committee cannot find users for this document.

STABILIZED NOTICE

This document has been declared "STABILIZED" by SAE Wheel Standards Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

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Documents

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1. SCOPE

The SAE J2530 provides performance, sampling, test procedures, and marking requirements for wheels intended for normal highway use on passenger cars, light trucks, and multipurpose passenger vehicle. This Recommended Practice (which is separate from SAE J2530) specifies the workflow of the Wheel Conformity Assessment Program. This program allows wheel manufacturers to register their product compliant to SAE J3010. The following items precede display of “SAE J3010” on any particular wheel design:

a. Manufacturer registration

All manufactures with the objective to pursue registration, shall complete the registration as an individual manufacturer via the registrar's website <http://wheeldb.registrar.domain>. The registration includes company contact information, wheels produced, and company identification marks.

b. Wheel design certification

All wheel designs intended for certification in accordance to this Recommended Practice, shall complete the application and submittal of test results via the above stated registrar website and in accordance to the procedures herewith.

c. Use of SAE J3010

Upon completion of the conformity assessment process, the Program Manager will post the image, identification, and conformity report of the wheel design on the corresponding website. Use of the "SAE J3010" mark in any form is restricted only to wheels noted in the online version of the Comprehensive Wheel Registry (REG-CWR).

d. Wheel test facility or laboratory accreditation registration

All facilities or laboratories (first-, second-, or third-party) intended for wheel testing under the subject conformity assessment process, shall complete the application and submittal of test results via the above stated registrar website and in accordance to the procedures herewith. Accreditation from the registrar is required before providing valid test reports as part of this conformity assessment program.

Manufacturers of wheels for passenger cars and light trucks, who advertise their products as "Conforms to SAE J3010" and label their product with the "SAE J3010" mark, shall follow these procedures. Conformity assessment of products to SAE J3010 is voluntary; however, adherence to these procedures is mandatory for those advertising their products as "Conforming to SAE J3010." Wheel designs using the "SAE J3010" mark meet the requirements of SAE J2530.

This conformity assessment program does not include other parameters like inner profile of the wheel and fitment to the brake or vehicle suspension, ventilation hole cooling efficiency, wheel attachment or length of thread engagement, etc., which are necessary for complete fitment and suitability to vehicles.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

SAE J175 Wheels - Impact Test Procedures-Road Vehicles

SAE J328 Wheels - Passenger Car and Light Truck Performance Requirements and Test Procedures

SAE J2530 Aftermarket Wheels - Passenger Cars and Light Truck - Performance Requirements and Test Procedures

2.1.2 ANSI Publications

Available from American National Standards Institute, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

NCAP National Conformity Assessment Principles for the United States

2.2 Related Publications

The following publications are provided for information purposes only and are not a required part of this SAE Technical Report.

2.2.1 ISO Publications

Available from American National Standards Institute, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

ISO 5725-5	Accuracy (trueness and precision) of measurement methods and results - Part 5: Alternative methods for the determination of the precision of a standard measurement method
ISO 5725-6	Accuracy (trueness and precision) of measurement methods and results - Part 6: Use in practice of accuracy values
ISO 13528	Statistical methods for use in proficiency testing by interlaboratory comparisons
ISO 16949	Quality management systems - Particular requirements for the application of ISO 9001:2008 for automotive production and relevant service part organizations
ISO 17025	General requirements for the competence of testing and calibration laboratories
ISO/IEC 17000	Conformity Assessment - Vocabulary and General Principles

2.2.2 U.S. Government Publications

Available from the Document Automation and Production Service (DAPS), Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Tel: 215-697-6297, <http://www.nhtsa.gov/about/importsafety>.

Recommended Best Practices for Importers of Motor Vehicles and Motor Vehicle Equipment

3. DEFINITIONS

In addition to all definitions from applicable publications (see 2.1), the following definitions apply.

3.1 MANUFACTURER OR IMPORTER OF RECORD

U.S. Customs term for the entity responsible for (1) ensuring the imported goods comply with local laws and regulations, (2) filing a completed duty entry and associated documents, and (3) paying the assessed import duties and other taxes on those goods.

3.2 REMANUFACTURER

An identifiable and unique company that reworks or modifies an existing wheel including (1) refinishing, (2) subassembly, or (3) repairing to install back on a vehicle.

3.3 VEHICLE MANUFACTURER

An identifiable and unique company, which manufactures and retails on-road vehicles (fitted with original wheel and tire assemblies) under the company's brand name(s).

3.4 WHEEL MANUFACTURER, PRODUCER, OR FABRICATOR

An identifiable and unique company producing a vehicle wheel from raw material into a final product with a unique part number and ready to be installed on a vehicle.

3.5 WHEEL SUPPLIER

An identifiable and unique company selling wheels to the market using a specific design with a unique code, marking, and under a proprietary brand. Wheel supplier also applies as a general term to reference companies fulfilling any definitions per items 3.1 to 3.4.

3.6 WHEEL DESIGN

Wheels which do share the same characteristics regarding (1) manufacturer, (2) construction material (ferrous, aluminum, magnesium, etc.), (3) construction method (one-piece welded, two-piece, forged, cast, stamped, etc.), (4) vary only in width and offset, and number of wheel attachment holes, (5) maximum load capacity, (6) maximum tire diameter, (7) casting mold or finished forging, and (8) machining lines for turning operations, can be treated as structurally equivalent. Other changes in wheels may require retesting in accordance to SAE J2530, section 5.3. If wheels come from different manufacturing sites, the manufacturer must select the worst-case (older equipment, newer staff, lower overall quality or higher product variability, etc.) facility to obtain the actual wheels for testing. If testing from the worst-case facility meets the acceptance criteria, the registration can be extended to all equivalent facilities. The manufacturer shall exercise due diligence to ensure the sampling for testing represents the entire manufacturing operation.

3.7 REGISTRAR (or program manager)

Entity that manages and supervises (a) registration of wheel suppliers (b) conformity assessment and registration of wheel designs, and (c) registration and approval of testing facilities through a technical committee. The registrar also administers the website and the applicable databases required for the proper operation of the herein defined program and a listing of approved suppliers of reference wheels.

3.8 SAE J3010 TASK FORCE

Industry-appointed committee responsibly of reviewing, directing, approving, or removing specific wheel designs or testing facilities as part of this conformity assessment program.

3.9 APPROVED TESTING FACILITY OR LABORATORY

Entity or division within a company dedicated to conducting wheel testing per applicable test procedures indicated herein as part of their scope of testing, with demonstrated competence and the ability to fulfill all requirements of this Recommended Practice.

3.10 WHITE-MARKED WHEEL

SAE J3010-W1-C Wheel design and construction used as a reference wheel for dynamic cornering fatigue test per Figure 1 and available through the registrar's website.



SAEJ3010-W1-R Wheel design and construction used as a reference wheel for dynamic radial fatigue test per figure 2 and available through the registrar's website. The wheel is machined to generate a non-concentric groove with the same diameter of the rim well and with a radius tangent to the 17° lines as shown in figure 2. This groove provides a localized stress riser that will give a lower and predictable fatigue life for equipment calibration.

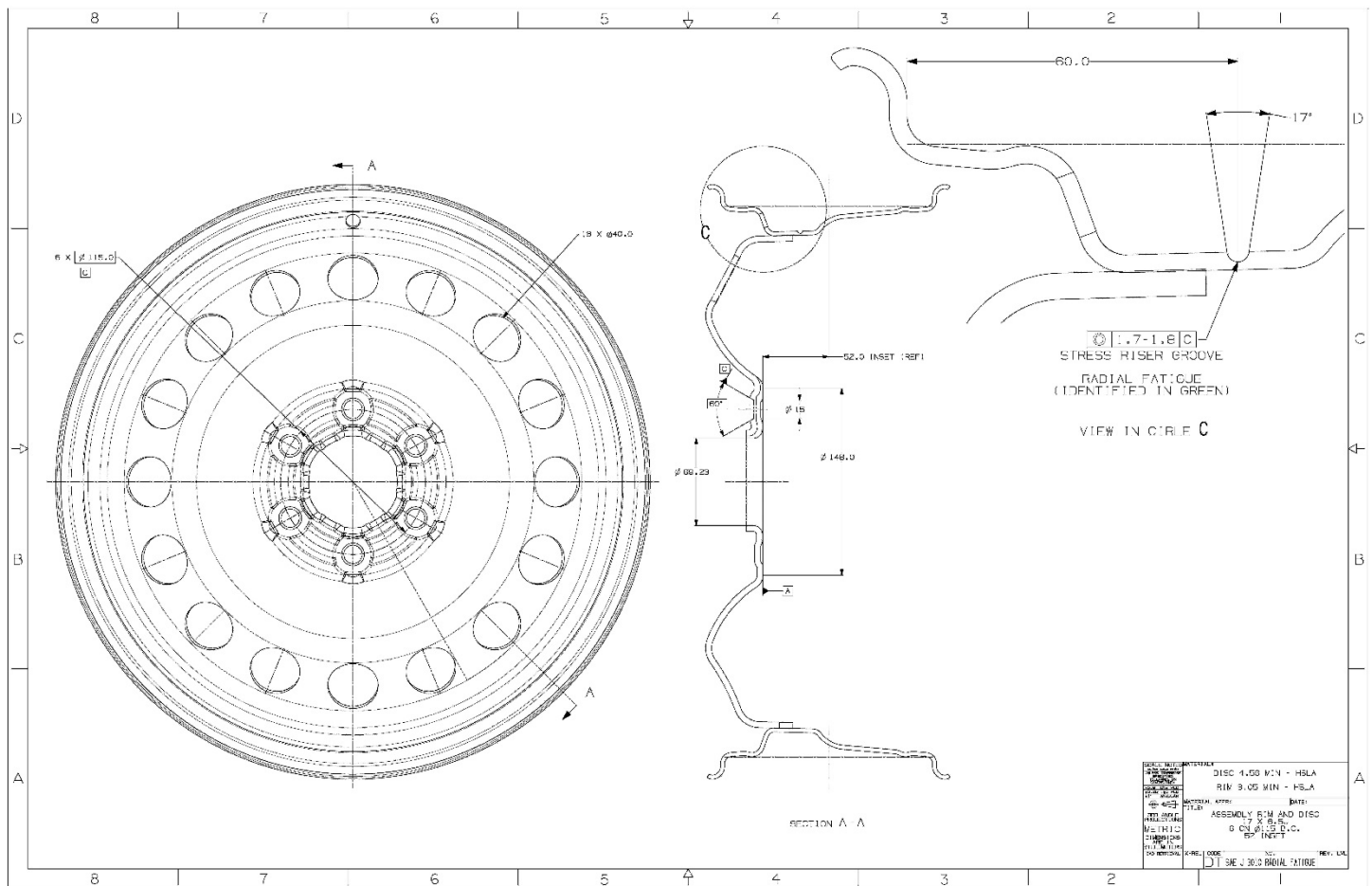


Figure 2 - SAEJ3010-W1-R green-marked wheel

4. WHEEL MANUFACTURER REGISTRATION

This registration; allows the wheel supplier to obtain a unique identification code for future submissions of wheel families for conformity assessment per SAE J3010. The addition of a given company on the wheel registry does not constitute conformance or endorsement of its products. The registration process is conducted online (see 1.a) and includes basic information regarding:

- New or additional registration
- Type of manufacturer (producer, remanufacturer, importer, or vehicle manufacturer)
- Type of vehicle for which wheels are supplied (passenger car, truck, buses, multipurpose, recreational, or trailer)
- Vehicle application for which wheels are supplied (on-road, off-road, military, or other)
- Wheel identification (brand in English language, country of origin, and example of wheel marking)
- Company and executive representative
- Plant(s) location(s) and complete address(es)
- Submission representative