

# SAE Rolling Resistance Task Group Overview

December 7, 2007

# Task Group Charter

- Initiated by a report to SAE: Highway Tire Forum Committee April 4, 2006
  - Pottinger, M.G. and Luchini, J.D., “Comparison of and Issues Between the SAE Rolling Resistance Test Recommended Practices,” International Tire Engineering Conference, Akron, OH, Sept. 2006
- Task Group Created April 4, 2006 by action of HTFC
- Group Membership
  - Dr. James A. Popio - Chairman
  - 23 participating task group members
  - 19 organizations
- Charter
  - Task Group to investigate the fidelity and application of SAE J1269 and J2452
    - Identify and address any discrepancies in and between J2452 & J1269
    - Single Point Testing
  - Identify and form subgroups as required
  - Propose any updates or revisions

# SAE Recommended Practice J1269

- **Foreword**—This SAE Recommended Practice provides methods for determining rolling resistance of passenger car, light truck, and highway truck and bus tires under controlled conditions.
  - The procedure is intended to provide a way of gathering data on a uniform basis, to be used for various purposes (for example, tire comparisons, determination of load or pressure effects, correlation with test results from fuel consumption tests, etc.).
- **Scope**—This SAE Recommended Practice applies to the laboratory measurement of rolling resistance of
  - Pneumatic passenger car
  - Light truck
  - Highway truck and bus tires.

# SAE Recommended Practice

## J2452

- **Foreword**— This SAE Recommended Practice establishes a laboratory method for determination of tire rolling resistance of Passenger Car and Light Truck tires.
  - Provides a standard for collection and analysis of rolling resistance data with respect to vertical load, inflation pressure, and velocity.
  - Intent is for estimation of the tire rolling resistance contribution to vehicle force applicable to SAE Vehicle Coastdown recommended practices J2263 and J2264.
  
- **Scope**— This SAE Recommended Practice is applicable to pneumatic Passenger Car “P” Type, Light Truck Metric, and Light Truck High Flotation tires, or similar tires approved by bodies other than Tire & Rim Association.
  - The methodology is applicable within normal operating ranges of vertical load and inflation pressure, and for velocities between 115 km/h and 15 km/h (71 mph and 9 mph) during a relatively short duration event such as a coastdown.
  - This procedure is applicable only to operation in the free-rolling mode at zero slip and camber angle for ambient temperatures between 20 °C and 28 °C (68 °F and 82 °F) and for surfaces with diameters of 1.2 m (48 in) diameter or greater.