

Submitted for recognition as an American National Standard

REAR VIEW MIRRORS—MOTORCYCLES

Foreword—This Document has not changed other than to put it into the new SAE Technical Standards Board Format.

1. **Scope**—This recommended practice specifies requirements for rear view mirror systems to provide the operator with a clear view to the rear.

2. References

2.1 **Applicable Publications**—The following publications form a part of the specification to the extent specified herein. Unless otherwise indicated the latest revision of SAE publications shall apply.

2.1.1 SAE PUBLICATIONS—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J213 MAR72—Definitions—Motorcycles

SAE J833 DEC83—USA Human Physical Dimensions

SAE J964 OCT84—Test Procedure for Determining Reflectivity of Rear View Mirrors

SAE J985 OCT88—Vision Factors Considerations in Rear View Mirror Design

3. **Application**—This recommended practice applies to all classes of motorcycles as defined in SAE J213 intended for use on public roads.

3.1 **Operator Dimensions**—Motorcycles intended for adult operators shall satisfy the requirement of this recommended practice for an operator having the dimensions of a 50th percentile USA human male (SAE J833). Motorcycles intended specifically for other than adult operators shall satisfy the requirements of this recommended practice for the 50th percentile of the intended operator population.

4. Requirements

4.1 Mounting

4.1.1 Each mirror should have its entire reflective surface located between planes passing through the eyepoint of an operator in the designed seating position, 45 deg above and below and 60 deg left and right of the forward line of sight (SAE J985).

4.1.2 The mounting shall provide for mirror adjustment to comply with 4.2.1.

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4.2 Field of View

- 4.2.1 The mirror system shall provide an operator in the designed seating position an indirect rearward view of a level road surface extending to the horizon, beginning at a point not greater than 30 m (98 ft) from the rearmost part of the vehicle. The mirror system shall also provide a field of view extending from the vehicle centerline 3.7 m (12 ft) both left and right at a distance 10 m (33 ft) behind the rearmost portion of the vehicle.
- 4.2.2 Each mirror shall provide an image that is upright with left and right sides reversed.

4.3 Mirror Construction

- 4.3.1 REFLECTIVE SURFACE SHAPE—Each mirror shall have a reflective surface either flat or convex in shape. Convex reflective surfaces shall have a radius of curvature not less than 51.0 cm (20.1 in).
- 4.3.2 REFLECTIVE SURFACE SIZE—Flat reflective surfaces shall have a minimum reflective area of 81.0 cm² (12.6 in²). Convex reflective surfaces shall have a minimum reflective area of 64.5 cm² (10.0 in²).
- 4.3.3 REFLECTANCE—The mirror reflectance shall be at least 50% when tested in accordance with SAE J964.

PREPARED BY THE SAE MOTORCYCLE COMMITTEE

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