



# SURFACE VEHICLE RECOMMENDED PRACTICE

J1578

OCT2014

Issued 1989-06  
Stabilized 2014-10

Superseding J1578 JAN2009

## Motorcycle Side Stand Retraction Test Procedure

### RATIONALE

This document addresses mature and stable technology which is not dynamic in nature.

### STABILIZED NOTICE

This document has been declared "Stabilized" by the SAE Motorcycle Technical Steering 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.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2014 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

**TO PLACE A DOCUMENT ORDER:** Tel: 877-606-7323 (inside USA and Canada)  
Tel: +1 724-776-4970 (outside USA)  
Fax: 724-776-0790  
Email: CustomerService@sae.org  
<http://www.sae.org>

SAE WEB ADDRESS:

Full document details: SAE J1578\_201410

SAE values your input. To provide feedback  
on this Technical Report, please visit  
[http://www.sae.org/technical/standards/J1578\\_201410](http://www.sae.org/technical/standards/J1578_201410)

Documents

Document Sharing Hub

## 1. **Scope**

- 1.1 This test procedure provides a standard method for evaluating the side stand retraction performance of a side stand/motorcycle combination.
- 1.2 This test procedure applies to any two-wheeled motorcycle without a sidecar, equipped with a side stand, and intended for highway use. (See SAE J213.)
- 1.3 This SAE Recommended Practice is intended as a guide toward standard practice but may be subject to frequent change to keep pace with experience and technical advances. This should be kept in mind when considering the use of this document.

## 2. **References**

- 2.1 **Applicable Publications**—The following publication forms a part of this specification to the extent specified herein. Unless otherwise specified, the latest issue of SAE publications shall apply.

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

SAE J213—Definitions—Motorcycles

SAE J1846—Characterizing a Test Surface for Motorcycle Side Stand Retraction Performance Testing

- 2.2 **Related Publication**—The following publication is provided for information purposes only and is not a required part of this document.

2.2.1 SAE PUBLICATION—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J1579—Motorcycle Side Stand Retraction Performance Requirements

### 3. Definitions

- 3.1 **Side Stand**—A device attached to the motorcycle that provides support, in conjunction with the motorcycle's two tires, for unattended parking of the motorcycle. Three-point ground support for unattended parking is provided by leaning the motorcycle toward the side stand until the side stand and the two tires are in contact with the ground.
- 3.2 **Deployed Position**—The position of a side stand in which it provides support, in conjunction with the two tires, for unattended parking of a motorcycle.
- 3.3 **Stowed Position**—The position of a side stand for driving a motorcycle, from which it shall neither interfere with the operator's control nor return unaided to a deployed position.
- 3.4 **Retract**—For a side stand to move from a deployed position to a stowed position.
- 3.5 **Longitudinal Plane of Symmetry**—A vertical plane as defined in SAE J213.

### 4. Test Vehicle

- 4.1 **Suspension Setting**—The suspension components shall be set to the motorcycle manufacturer's recommended damping and preload settings for the vehicle load and speed under the conditions of the test. If recommendations for suspension adjustment are not provided by the motorcycle manufacturer, suspension settings for damping and preload shall each be at the midpoint of their adjustment range, or if the adjustment increments include no midpoint setting, at the next setting below the midpoint of the range.
- 4.2 **Tire Pressure**—The tire pressure shall be set to the motorcycle manufacturer's recommended pressure for the vehicle load and speed under the conditions of the test.
- 4.3 **Fuel Level**—The fuel tank shall be filled to at least 75% of the nominal fuel tank capacity.
- 4.4 **Fluid Levels**—The lubricants, coolants, and other fluids shall be at the normal full levels.

### 5. Test Operator

- 5.1 The test operator shall be skilled at motorcycle operation, and shall be experienced with the machine under test and this test procedure before conducting any test runs.
- 5.2 For solo test conditions, the combined mass of the test operator, protective equipment, instrumentation, and other items added to the motorcycle for testing shall be 75 to 90 kg (165 to 198 lb).
  - 5.2.1 Protective equipment for the operator shall include helmet, eye protection, abrasion resistant jacket and trousers, gloves, and boots.

### 6. Test Site

- 6.1 The test site on which the test course is laid out shall be a level area. Space shall be provided for acceleration, deceleration, and out of course excursion of the test vehicle.
- 6.2 **Test Course**
  - 6.2.1 The test course consists of a target test path and 1.5 m (4 ft, 11 in) lane width centered upon the target test path.