SAE International

SURFACE VEHICLE RECOMMENDED PRACTICE

SAE J2348 DEC2012

Issued 1997-03
Revised 2012-12

Superseding J2348 MAR2002

Electric Windshield Washer Switch - Trucks, Buses, and Multipurpose Vehicles

RATIONALE

The typo is an obvious error since a temperature cannot be 165 degrees C and 74 degrees C at the same time. The conversion was correct but the annotation should have been F rather than C.

1. SCOPE

This SAE Recommended Practice establishes for trucks, buses, and multipurpose passenger vehicles with GVW of 4500 kg (10 000 lb) or greater:

a. Minimum performance requirements for the switch for activating electric or electro-pneumatic windshield washer systems.

b. Uniform test procedures that include those tests that can be conducted on uniform test equipment by commercially available laboratory facilities.

The test procedures and minimum performance requirements, outlined in this document, are based on currently available engineering data.

It is the intent that all portions of the document will be periodically reviewed and revised as additional data regarding windshield washing system performance is developed.

2. REFERENCES

2.1 Applicable Document

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 724-776-4970 (outside USA), www.sae.org.

SAE J2349 Electric Windshield Wiper Switch - Trucks, Buses, and Multipurpose Vehicles

SAENORM.COM : Click to view the full PDF of j2348_201212

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 © 2012 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
SAE WEB ADDRESS: http://www.sae.org

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/J2348_201212

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 SAE Publications

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

SAE J198 Windshield Wiper System - Trucks, Buses, and Multipurpose Vehicles

SAE J234 Electric Windshield Washer Switch - Passenger Car

SAE J258 Circuit Breakers

SAE J553 Circuit Breakers

SAE J1944 Windshield Washer Systems - Trucks, Buses, and Multipurpose Vehicles

2.2.2 ISO Publication

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

ISO 3469 Windscreen Washing System - Test Method

3. DEFINITION

3.1 ELECTRIC WINDSHIELD WASHER SWITCH

That part of an electric or electro-pneumatic windshield washer system by which the operator of a vehicle causes the windshield washers to function.

4. TEMPERATURE TEST

4.1 To insure basic function, the switch shall be manually cycled for 10 cycles at design electrical load at 24 °C ± 5.5 °C (75 °F ± 10 °F); 74, +0, –2.8 °C (165, +0, –5 °F); and –32, +2.8, –0 °C (–25, +5, –0 °F) after a 1 h exposure at each of these temperatures. The switch shall be electrically and mechanically operable during each of these cycles.

4.2 This same switch shall be used for the endurance tests described in Section 5.

5. ENDURANCE TEST SETUP

5.1 The switch shall be set up to operate its design electrical load.

5.2 The test shall be set up to operate the switch for the prescribed number of completed cycles. One complete cycle shall consist of sequencing through each position (with dwell in each position) and return without dwell in intermediate positions to the initial position.

The test equipment shall be so arranged as to provide the following mechanical time requirements:

a. Travel Time - 0.1 to 0.5 s (time from one position to the next)

b. Dwell Time - 1.0 to 2.0 s (time in each position)

SAENORM.COM : Click to view the full PDF of j2348_201212