



SURFACE VEHICLE RECOMMENDED PRACTICE

J2111™

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Headlamp Cleaners

RATIONALE

This document will be stabilized.

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Documents

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1. SCOPE

This SAE Recommended Practice provides test procedures, performance requirements, and guidelines for cleaners intended for use on motor 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 J387 Terminology - Motor Vehicle Lighting

SAE J575 Test Methods and Equipment for Lighting Devices and Components for Use on Vehicles Less than 2032 mm in Overall Width

SAE J759 Lighting Identification Code

SAE J1383 Performance Requirements for Replaceable Bulb Motor Vehicle Headlamps

2.2 Related Publication

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

2.2.1 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 3267–1975(e) Road vehicles - Headlamp cleaners

2.3 Other Publications

ECE R45-01

Japanese Type Designation Enforcement Procedures for Devices, Art. 42, 120 Attachment 55 (MLIT Announcement 619/2002) and TRIAS 56-2003

National Standard of the People's Republic of China GB 21260-2007

Standards of India AIS-034 and AIS-083

Brazilian CONTRAN 227-2007 § 4.3.9

Australian Design Rule 75/00 – Headlamp Cleaners) 2006

3. DEFINITIONS

3.1 HEADLAMP CLEANER

A complete device with whereby the exterior light emitting surface a lowbeam and/or other road illuminating devices can be cleaned. Examples of common types are:

- a. Headlamp cleaner with brushes or wipers used to spread cleaning fluid over the lens surface and to remove dirt.
- b. Headlamp cleaner with nozzles to spread cleaning fluid over the lens surface.

3.2 FLUID CONTAINER

The part of the headlamp cleaner in which the cleaning fluid may be stored.

3.3 CLEANING PERIOD

The period of time necessary for any specified requirements to be met. This includes any pretreatment period.

3.4 CLEANING FLUID

The commercially available washer liquid recommended for use in conjunction with a headlamp cleaner.

3.5 CLEANING EFFICIENCY

The percentage of the luminous intensities produced by a lamp as measured along specific test direction(s) after cleaning with respect to the values measured along those same direction(s) on the same clean lamp.

3.6 TEST MIXTURE

A mixture of water and polluting agents to be applied to the lamp outer lens for testing it.

4. IDENTIFICATION CODE

Headlamp cleaners shall be marked in accordance with SAE J759—Lighting Identification Code with HC. This designation may be placed on the fluid container, the fluid container cap, or at any other location where it can be easily read.

5. TESTS

5.1 Test Facilities and Environment

5.1.1 Testing shall be carried out in still air at an ambient temperature of 23 ± 5 °C.

5.1.2 Electrically-operated cleaners shall be operated at the voltage specified by the manufacturer, with a tolerance of ± 0.2 V.

5.1.3 In pneumatic systems, the air pressure used to operate the headlamp cleaner shall be as specified by the manufacturer.

5.2 Equipment

5.2.1 Test fixture

The headlamp(s) and headlamp cleaner shall be mounted in a test fixture reproducing the mounting attitude in the vehicle, including the position of one component relative to the other, and providing the conditions necessary for normal operation of the headlamps and the cleaner.