



# SURFACE VEHICLE STANDARD

**J292™****JUL2021**

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Superseding J292 APR2014

(R) Snowmobile and Snowmobile Cutter Lamps, Reflective Devices,  
and Associated Equipment

## RATIONALE

This revision opens up to alternative lamps and reflex reflector standards. It also brings clarifications for the reflex reflectors. It clarifies that both low (passing) beam and high (driving) beam are required. This document was converted from an SAE Recommended Practice to an SAE Standard.

### 1. SCOPE

This SAE Standard describes snowmobile and snowmobile cutter requirements for the installation of lamps, reflective devices, and associated equipment.

### 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](http://www.sae.org).

|          |                                                               |
|----------|---------------------------------------------------------------|
| SAE J33  | Snowmobile Definitions and Nomenclature - General             |
| SAE J68  | Tests for Snowmobile Switching Devices and Components         |
| SAE J107 | Operator Controls and Displays on Motorcycles                 |
| SAE J277 | Maintenance of Design Voltage - Snowmobile Electrical Systems |
| SAE J278 | Snowmobile Stop Lamp                                          |
| SAE J279 | Snowmobile Tail Lamp (Rear Position Lamp)                     |
| SAE J280 | Snowmobile Headlamps                                          |
| SAE J387 | Terminology - Motor Vehicle Lighting                          |

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|           |                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------|
| SAE J565  | Semiautomatic Headlamp Beam Switching Devices                                                 |
| SAE J585  | Tail Lamps (Rear Position Lamps) for Use on Motor Vehicles Less than 2032 mm in Overall Width |
| SAE J586  | Stop Lamps for Use on Motor Vehicles Less than 2032 mm in Overall Width                       |
| SAE J592  | Sidemarkers Lamps for Use on Road Vehicles Less than 2032 mm in Overall Width                 |
| SAE J594  | Reflex Reflectors                                                                             |
| SAE J1282 | Snowmobile Brake Control Systems                                                              |

#### 2.1.2 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, [www.astm.org](http://www.astm.org).

ASTM D4956-19 Standard Specification for Retroreflective Sheeting for Traffic Control

#### 2.1.3 ISO Publications

Available from International Organization for Standardization, ISO Central Secretariat, 1, ch. de la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland, Tel: +41 22 749 01 11, [www.iso.org](http://www.iso.org).

ISO 6727 Road Vehicles - Motorcycles and Mopeds - Symbols for Controls, Indicators and Tell-Tales

#### 2.1.4 UN Publications

Available from United Nations Economic Commission for Europe, Palais des Nations, CH 1211, Geneva 10, Switzerland, Tel +41 (0) 229 17 12 34. [www.unece.org/trans/main/wp29/wp29regs.html](http://www.unece.org/trans/main/wp29/wp29regs.html)

|         |                                                                                                                                                                                                                                                    |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UN R3   | UN Regulation No. 3 as amended up to and including the 02 series: Uniform Provisions Concerning the Approval of Retro-Reflecting Devices for Power-Driven Vehicles and Their Trailers                                                              |
| UN R7   | UN Regulation No. 7 as amended up to and including the 02 series: Uniform Provisions Concerning the Approval of Front and Rear Position Lamps, Stop-Lamps and End-Outline Marker Lamps for Motor Vehicles (Except Motor Cycles) and Their Trailers |
| UN R78  | UN Regulation No. 78: Uniform Provisions Concerning the Approval of Vehicles of Categories L1, L2, L3, L4 and L5 with Regard to Braking                                                                                                            |
| UN R91  | UN Regulation No. 91 as amended up to and including the 00 series: Uniform Provisions Concerning the Approval of Side-Marker Lamps for Motor Vehicles and Their Trailers                                                                           |
| UN R104 | UN Regulation No. 104 as amended up to and including the 00 series: Uniform Provisions Concerning the Approval of Retro-Reflective Markings for Vehicles of Category M, N and O                                                                    |
| UN R123 | UN Regulation No. 123: Uniform Provisions Concerning the Approval of Adaptive Front-Lighting Systems (AFS) for Motor Vehicles                                                                                                                      |
| UN R148 | UN Regulation No. 148 as amended up to and including the 00 series: Uniform Provisions Concerning the Approval of Light-Signalling Devices (Lamps) for Power-Driven Vehicles and Their Trailers (LSD)                                              |
| UN R150 | UN Regulation No. 150 as amended up to and including the 00 series: Uniform Provisions Concerning the Approval of Retro-Reflective Devices and Markings for Power-Driven Vehicles and Their Trailers (RRD)                                         |

### 2.1.5 Transport Canada Publications

Transport Canada documents are available from Transport Canada, Tower C, Place de Ville, 330 Sparks Street Ottawa, Ontario K1A 0N5, Tel: 1-800-305-2059, [www.tc.gc.ca](http://www.tc.gc.ca).

CMVSS 108 Canadian Motor Vehicle Safety Regulation, C.R.C.,c. 1038 - Standard 108: Lighting System and Retroreflective Devices

### 2.1.6 Code of Federal Regulations (CFR) Publications

Available from the United States Government Printing Office, 732 North Capitol Street, NW, Washington, DC 20401, Tel: 202-512-1800, [www.gpo.gov](http://www.gpo.gov).

FMVSS 108 CFR Title 49 Part 571.108: Federal Motor Vehicle Safety Standard No. 108 - Lamps, Reflective Devices, and Associated Equipment

## 3. DEFINITIONS

SNOWMOBILE: As defined by SAE J33.

SNOWMOBILE CUTTER: As defined by SAE J33.

CURB WEIGHT: As defined by SAE J33.

The terminologies contained in SAE J387 apply to this standard.

## 4. MINIMUM LAMPS AND REFLECTIVE DEVICES

Snowmobiles and snowmobile cutters shall be equipped with lamps and reflective devices per the requirements of Table 1 and the reflex reflectors of 4.1.

### 4.1 Reflex Reflectors

Reflex reflectors shall comply with either the “unit-type” reflex reflector of 4.1.1 or the “area-type” reflex reflector of 4.1.2.

4.1.1 Reflex reflectors (i.e., “unit-type” reflex reflector; see Figure 1) compliant with either:

4.1.1.1 Reflex reflectors for restricted-use vehicle per CMVSS 108 (15) (refer to Technical Standard Document [TSD] 108 revision 6 section S8.1) except for the number (TSD 108 S8.1.1), mounting location (TSD 108 S8.1.3), and mounting height (TSD 108 S8.1.4); or

4.1.1.2 Reflex reflector per FMVSS 108 S8.1 except for the number (S8.1.1), mounting location (S8.1.3), and mounting height (S8.1.4); or

4.1.1.3 SAE J594; or

4.1.1.4 UN R3; or

4.1.1.5 Retro-reflector per UN R150.

4.1.2 Reflex reflectors, of reflective sheeting type (i.e., “area-type” reflex reflector; see Figure 2) compliant with the reflective sheeting material of 4.1.2.1 and the color and photometry of 4.1.2.2.

4.1.2.1 The reflective sheeting material compliant with either:

4.1.2.1.1 ASTM D4956; or

4.1.2.1.2 Retroreflective sheeting material per CMVSS 108 (1) (refer to TSD 108 revision 6 section S8.2.1.2); or

4.1.2.1.3 Retroreflective sheeting material per FMVSS 108 S8.2.1.2; or

4.1.2.1.4 Retro-reflective marking material per UN R104; or

4.1.2.1.5 Retro-reflective marking material per UN R150.

4.1.2.2 The color and photometry requirements of either:

4.1.2.2.1 Reflex reflectors for restricted-use vehicle per CMVSS 108 (15) (refer to TSD 108 revision 6 section S8.1); or

4.1.2.2.2 Reflex reflector per FMVSS 108 S8.1; or

4.1.2.2.3 SAE J594; or

4.1.2.2.4 UN R3; or

4.1.2.2.5 Retro-reflector per UN R150.



**Figure 1 - Typical "unit-type" reflex reflector**



**Figure 2 - Typical "area-type" reflex reflector**