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Regulations Amending the Motor Vehicle Safety Regulations (Interpretation and Standards 108 and 108.1): SOR/2018-43

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MOTOR VEHICLE SAFETY ACT

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Her Excellency the Governor General in Council, on the recommendation of the Minister of Transport, pursuant to subsections 5(1) [a] and 11(1) [b] of the *Motor Vehicle Safety Act* [c], makes the annexed *Regulations Amending the Motor Vehicle Safety Regulations (Interpretation and Standards 108 and 108.1)*.

Regulations Amending the Motor Vehicle Safety Regulations (Interpretation and Standards 108 and 108.1)

Amendments

1 (1) The definitions *H-V axis*, *headlamp assembly*, *optically combined lamps* and *sealed beam headlamp* in subsection 2(1) of the *Motor Vehicle Safety Regulations* [1] are repealed.

(2) The definitions *daytime running lamp*, *headlamp* and *overall width* in subsection 2(1) of the Regulations are replaced by the following:

daytime running lamp means a lamp that produces a steady-burning light signal intended to improve the visibility of a vehicle from the front and the front sides; (*feu de jour*)

headlamp means a lighting device that produces an upper beam, a lower beam, or both; (*projecteur*)

overall width means, except in sections 104 and 108 of Schedule IV, the widest part of a vehicle with the doors and windows closed and the wheels in the straight-ahead position, exclusive of signal lamps, marker lamps, outside rearview mirrors, flexible fender extensions and mud flaps; (*largeur hors tout*)

(3) Subsection 2(1) of the Regulations is amended by adding the following in alphabetical order:

lower beam means a beam that is intended to illuminate the road and its environs ahead of a vehicle when the vehicle is meeting or closely following another vehicle; (*faisceau de croisement*)

reflex reflector means a device on a vehicle that is intended to indicate the position and dimensions of the vehicle to the driver of an approaching vehicle using light reflected from the lamps of the approaching vehicle; (*cataphote*)

upper beam means a beam that is intended primarily for distance illumination ahead of a vehicle when the vehicle is not meeting or closely following another vehicle; (*faisceau de route*)

2 The portion of item 108 of Schedule III to the Regulations in column II is replaced by the following:

Column I	Column II
Item (CMVSS)	Description
108	Lighting Systems and Reflective Devices

3 Item 108.1 of Schedule III to the Regulations is repealed.

4 The headings before section 108 and sections 108 and 108.1 of Part II of Schedule IV to the Regulations are replaced by the following:

Lighting Systems and Reflective Devices (Standard 108)

Passenger Cars, Multi-purpose Passenger Vehicles, Trucks, Trailers and Buses

108 (1) Every passenger car, multi-purpose passenger vehicle, truck, trailer and bus shall conform to *Technical Standards Document No. 108, Lamps, Reflective Devices, and Associated Equipment* (TSD 108), as amended from time to time.

Three-wheeled Vehicles

(2) Every three-wheeled vehicle shall be equipped with lamps, reflex reflectors and associated components as required under subsection (1) for passenger cars, and

(a) if an outermost parking lamp is installed more than 400 mm from the nearest of the two outer edges of the vehicle that are used to determine the overall width of the vehicle, with a white forward-facing reflex reflector that is installed not more than 400 mm from that edge to indicate the width of the vehicle; and
(b) if an outermost tail lamp or outermost rear reflex reflector is installed more than 400 mm from the nearest of the two outer edges of the vehicle that are used to determine the overall width of the vehicle, with a red rearward-facing reflex reflector that is installed not more than 400 mm from that edge to indicate the width of the vehicle.

Alternative Lamps for Passenger Cars, Three-wheeled Vehicles, Multi-purpose Passenger Vehicles, Trucks and Buses

(3) Subject to subsection (4), instead of being equipped with headlamps as required under subsection (1) or (2), as the case may be, passenger cars, three-wheeled vehicles, multi-purpose passenger vehicles, trucks and buses may be equipped with adaptive driving beam lamps that conform to SAE Recommended Practice J3069, *Adaptive Driving Beam* (June 2016), except that the lamps shall not be capable of activation or deactivation by pedal.

(4) If the adaptive driving beam is formed by the entirety or a portion of an upper beam or lower beam, or both, the lamps shall also conform to TSD 108, except that despite S10.18, horizontal aim adjustment is allowed.

(5) Instead of being equipped with headlamps as required under subsection (1) or (2), as the case may be, passenger cars, three-wheeled vehicles, multi-purpose passenger vehicles, trucks and buses may be equipped with headlamps that

(a) in the case of a passenger car, multi-purpose passenger vehicle, truck or bus, conform to
- **(i)** United Nations Regulation No. 8, *Uniform Provisions Concerning the Approval of Motor Vehicle Headlamps Emitting an Asymmetrical Passing Beam or a Driving Beam or Both and Equipped with Halogen Filament Lamps (H_1, H_2, H_3, HB_3, HB_4, H_7, H_8, H_9, HIR1, HIR2 and/or H_{11})*, as amended from time to time,
- **(ii)** United Nations Regulation No. 20, *Uniform Provisions Concerning the Approval of Motor Vehicle Headlamps Emitting an Asymmetrical Passing Beam or a Driving Beam or Both and Equipped with Halogen Filament Lamps (H_4 Lamps)*, as amended from time to time,
- **(iii)** United Nations Regulation No. 31, *Uniform Provisions Concerning the Approval of Power-Driven Vehicle's Halogen Sealed-beam Headlamps (HSB) Emitting a European Asymmetrical Passing Beam or a Driving Beam or Both*, as amended from time to time,
- **(iv)** United Nations Regulation No. 98, *Uniform Provisions Concerning the Approval of Motor Vehicle Headlamps Equipped with Gas-discharge Light Sources*, as amended from time to time, or
- **(v)** United Nations Regulation No. 112, *Uniform Provisions Concerning the Approval of Motor Vehicle Headlamps Emitting an Asymmetrical Passing-beam or a Driving-beam or Both and Equipped with Filament Lamps and/or Light-emitting Diode (LED) Modules*, as amended from time to time;

(b) in the case of a three-wheeled vehicle, conform to
- **(i)** the regulation referred to in subparagraph (a)(i), (ii) or (v), or
- **(ii)** the regulation referred to in subparagraph (a)(iii) or (iv), as if the vehicle were a passenger car;

(c) are installed on the vehicle in such a manner as to produce only a beam pattern for right-hand traffic, and, if the vehicle is fitted with a mechanism that allows the headlamps to produce a beam pattern for left-hand traffic, that mechanism is inoperative; and
(d) conform to, as applicable, the physical tests referred to in the following provisions of TSD 108:
- **(i)** S10.13.4,
- **(ii)** S10.14.7, and
- **(iii)** S10.15.7.

(6) Instead of being equipped with headlamps in accordance with subsection (1) or (2), as the case may be, passenger cars, three-wheeled vehicles, multi-purpose passenger vehicles, trucks and buses may be equipped with headlamps that conform to United Nations Regulation No. 123, *Uniform Provisions Concerning the Approval of Adaptive Front-lighting Systems (AFS) for Motor Vehicles*, as amended from time to time.

(7) The headlamps referred to in subsection (6) shall

(a) be installed
- **(i)** in accordance with paragraph 6.22 of United Nations Regulation No. 48, *Uniform Provisions Concerning the Approval of Vehicles with Regard to the Installation of Lighting and Light-signalling Devices*, as amended from time to time, except that, despite paragraph 6.22.6.2, the automatic levelling device is mandatory in all cases, and
- **(ii)** in such a manner as to produce only a beam pattern for right-hand traffic and, if the vehicle is fitted with a mechanism that allows the headlamps to produce a beam pattern for left-hand traffic, that mechanism shall be inoperative; and

(b) above a mounting height of 850 mm, have a maximum intensity that does not exceed the intensity requirements under TSD 108 for upper beam headlamps where the mounting height is measured to the centre of the highest mounted lamp.

(8) For the purposes of subsections (5) and (6), the following requirements of the United Nations Regulations referred to in those subsections do not apply:

(a) any requirements respecting the type-approval process;
(b) any requirements respecting the marking of type-approved headlamps; and
(c) any requirements respecting
- **(i)** the conformity of production of type-approved headlamps,
- **(ii)** the penalties for non-conformity of production, and
- **(iii)** the modification of a headlamp type and extension of approval.

(9) For the purposes of subsection (6) and subparagraph (7)(a)(i), United Nations Regulations Nos. 48 and 123 are considered to be applicable to three-wheeled vehicles, despite any provision to the contrary in those Regulations.

Motorcycles Other than Motor Tricycles

(10) Every motorcycle other than a motor tricycle shall conform to TSD 108, except that

(a) S6.1.3.5.1 (Vertical headlamp arrangement) does not apply; and
(b) despite S10.18, S10.18.1 applies to motorcycles except that “both vertical and horizontal aim” shall be read as “the vertical aim” .

Motor Tricycles

(11) Every motor tricycle shall conform to TSD 108, except that

(a) the following provisions of TSD 108 do not apply:
- **(i)** S6.1.3.5.1 (Vertical headlamp arrangement), and
- **(ii)** S10.17.1.2.2 (distance between headlamps);

(b) despite S10.18, S10.18.1 applies to motor tricycles except that “both vertical and horizontal aim” shall be read as “the vertical aim” ;
(c) despite S6.1.1 and S6.1.3.1 and Table I-c, a motor tricycle shall be equipped with tail lamps, stop lamps and reflex reflectors in the number and at the mounting locations specified in Table I-a for passenger cars; and
(d) instead of being equipped with headlamps as specified in S6.1 and Table I-c, a motor tricycle may be equipped with lower beam headlamps and upper beam headlamps as specified in S6.1 and Table I-a for passenger cars.

(12) In addition to being equipped with reflex reflectors and lamps as specified in S6.1 and Table I-c of TSD 108, a motor tricycle shall be

(a) equipped with parking lamps as specified in S6.1 and Table I-a of TSD 108 for passenger cars;
(b) if an outermost parking lamp is installed more than 400 mm from the nearest of the two outer edges of the motor tricycle that are used to determine the overall width of the motor tricycle, equipped with a white forward-facing reflex reflector that is installed not more than 400 mm from that edge to indicate the width of the motor tricycle; and
(c) if an outermost tail lamp or outermost rear reflex reflector is installed more than 400 mm from the nearest of the two outer edges of the motor tricycle that are used to determine the overall width of the motor tricycle, equipped with a red rearward-facing reflex reflector that is installed not more than 400 mm from that edge to indicate the width of the motor tricycle.

Alternative Headlamps for Motorcycles

(13) Instead of being equipped with headlamps as required under subsection (10) or (11), as the case may be, motorcycles may be equipped with headlamps that

(a) conform to
- **(i)** subsection (5),
- **(ii)** United Nations Regulation No. 57, *Uniform Provisions Concerning the Approval of Headlamps for Motor Cycles and Vehicles Treated as Such*, as amended from time to time,
- **(iii)** United Nations Regulation No. 72, *Uniform Provisions Concerning the Approval of Motor Cycle Headlamps Emitting an Asymmetrical Passing Beam and a Driving Beam and Equipped with Halogen Lamps (HS_1 Lamps)*, as amended from time to time, or
- **(iv)** United Nations Regulation No. 113, *Uniform Provisions Concerning the Approval of Motor Vehicle Headlamps Emitting a Symmetrical Passing Beam or a Driving Beam or Both and Equipped with Filament, Gas-discharge Light Sources or LED Modules*, as amended from time to time;

(b) are installed in accordance with the requirements of paragraphs 5.7, 5.11, 5.13, 6.1 and 6.2 of United Nations Regulation No. 53, *Uniform Provisions Concerning the Approval of Category L_3 Vehicles with Regard to the Installation of Lighting and Light-Signalling Devices*, as amended from time to time; and
(c) in the case of headlamps conforming to a Regulation referred to in subparagraph (a)(ii), (iii) or (iv), conform to
- **(i)** the performance requirements of the vibration test, moisture test, dust test and corrosion test described in S14.5 of TSD 108, and
- **(ii)** in the case of headlamps that do not incorporate a glass lens, the performance requirements of the plastic optical materials tests described in S14.4 of TSD 108.

(14) For the purposes of subsection (13), the following requirements of the United Nations Regulations referred to in that subsection do not apply:

(a) any requirements respecting the type-approval process;
(b) any requirements respecting the marking of type-approved headlamps; and
(c) any requirements respecting
- **(i)** the conformity of production of type-approved headlamps,
- **(ii)** the penalties for non-conformity of production, and
- **(iii)** the modification of a headlamp type and extension of approval.

Restricted-use Motorcycles

(15) Every restricted-use motorcycle shall be equipped with reflex reflectors as required under subsection (10) for motorcycles other than motor tricycles.

Additional Requirements for the Activation of Certain Lamps

(16) In addition to being activated as specified in Table I-a of TSD 108, parking lamps, tail lamps, licence plate lamps and side marker lamps on a passenger car, multi-purpose passenger vehicle, three-wheeled vehicle, truck or bus shall be activated

(a) while the front fog lamps on the vehicle are activated in a steady-burning state other than as daytime running lamps; or
(b) while the rear fog lamps on the vehicle are activated in a steady-burning state.

(17) Except when it is used to give intermittent luminous warnings at short intervals, the upper beam may be activated only when the master light switch is in the “headlamps on” position or in the “AUTO” (automatic) position and the conditions for automatic activation of the lower beam exist.

(18) Despite S6.1.5 and Table I-a of TSD 108, the tail lamps may be activated without the concurrent activation of the headlamps or parking lamps, if the daytime running lamps are activated.

(19) Beginning on September 1, 2021, if the fuel level indicator, oil pressure indicator, engine coolant temperature indicator, battery charging indicator, transmission control position indicator or speedometer indicator or their identifications are illuminated when the daytime running lights of a vehicle are in use,

(a) the lower beam headlamps shall
- **(i)** automatically activate in a steady-burning state in less than two seconds when the ambient light outside the vehicle is less than 1,000 lux while the transmission control is in the forward or reverse position and the vehicle is in motion, unless the lower beam headlamps were deactivated manually after their automatic activation following the most recent disarming of the immobilization system in accordance with section 114, and
- **(ii)** automatically deactivate under the conditions set out by the manufacturer; or

(b) the tail lamps shall be alight.

(20) For the purposes of paragraph (19)(a), the ambient light outside a vehicle shall be measured on a horizontal surface, with a cosine corrected sensor at the same height as the mounting position of the ambient light sensor on the vehicle.

Fog Lamps and Forward Auxiliary Road Illumination Lamps — Aiming Adjustment Mechanism

(21) Every passenger car, multi-purpose passenger vehicle, three-wheeled vehicle, motor tricycle, truck and bus equipped with a front fog lamp or forward auxiliary road illumination lamp shall be equipped with a mechanism for that lamp that

(a) allows aim adjustment of the vertical aim by one person to maintain the beam pattern of the lamp within the full range of vertical pitch of the vehicle, with the use of ordinarily available tools; and
(b) allows the adjustment referred to in paragraph (a) after being subjected to the corrosion test procedure set out in S14.6.3.1 of TSD 108.

Information

(22) There shall be provided, in the owner's manual, with every passenger car, multi-purpose passenger vehicle, truck and bus, the information required by TSD 108 in relation to the safe operation of the lighting systems and reflective devices of the vehicle.

(23) There shall be provided, in the owner's manual, with every three-wheeled vehicle, information relating to the safe operation of the lighting systems and reflective devices of the vehicle that is the same as the information required by TSD 108 in relation to passenger cars.

(24) Except for the words “sealed beam” referred to in S6.5.3.3.1 of TSD 108 and the word “motorcycle” referred to in S10.17.2 of TSD 108, any information required under this section to be marked on a passenger car, multi-purpose passenger vehicle, three-wheeled vehicle, motorcycle, restricted-use motorcycle, trailer, truck or bus shall be in English and French.

Daytime Running Lamps

(25) Subsections (26) to (30) apply to passenger cars, multi-purpose passenger vehicles, trucks, buses and three-wheeled vehicles.

(26) Every vehicle shall be equipped with daytime running lamps

(a) in accordance with S6.1.3.1 of TSD 108, except that the reference to “applicable photometric requirements” in that provision is a reference to the applicable photometric requirements set out in SAE Standard J2087, *Daytime Running Light* (August 2017) (SAE Standard J2087);
(b) in accordance with S6.2 of TSD 108, except that the references in that provision to “lighting equipment required by this TSD” and to “required lamp” include a reference to “daytime running lamp” ; and
(c) that conform to
- **(i)** sections 5, 6 and 7.3.1 of SAE Standard J2087, except that despite section 6.1.2, if a daytime running lamp is optically combined with a white front position lamp that has a projected luminous lens area of 200 cm^2 or less, it may conform to the light intensity distribution values shown in figure 1 when tested in accordance with section 5.1, or
- **(ii)** until September 1, 2020, SAE Standard J583, *Front Fog Lamps* (September 2016) (SAE Standard J583).

(27) Despite section 6.4 of SAE Standard J2087, the light from a daytime running lamp shall be

(a) if the lamp is optically combined with a parking lamp, white or yellow;
(b) if produced by a turn signal lamp, yellow; and
(c) in all other cases, white.

Switching — Daytime Running Lamps

(28) Subject to subsections (29) and (30), the daytime running lamps on a vehicle shall be activated not later than when the vehicle is set in motion under its own power and shall remain activated until the motors or engines used for the vehicle's propulsion are switched off and as a result the vehicle enters a mode of operation other than “accessory” or “on” .

(29) The daytime running lamps on a vehicle shall

(a) be deactivated while the lower beam headlamps are activated to provide road illumination;
(b) beginning on September 1, 2020, be deactivated while the front fog lamps provide road illumination after being activated by the driver; and
(c) if they also serve as front turn signal lamps,
- **(i)** be deactivated on the side of the vehicle where a turn signal is activated, while that turn signal is activated, and
- **(ii)** be deactivated on both sides of the vehicle while the hazard warning signal is activated.

(30) The daytime running lamps on a vehicle may be

(a) deactivated while the parking brake is applied or the transmission control is in the park or neutral position and the vehicle is not in motion;
(b) deactivated while the headlamps are being flashed for signalling purposes;
(c) switched off manually, in which case they shall reactivate automatically, at the discretion of the manufacturer, either not later than when the vehicle travels more than 100 m or when the speed of the vehicle exceeds 10 km/h; and
(d) wired to flash for signalling purposes.

Motorcycle Running Lamps

(31) The following lamps on a motorcycle shall be activated not later than when the motorcycle is set in motion under its own power and shall remain activated until the motorcycle's main electrical system is turned off or until the motorcycle is put in the “accessory” mode of operation: