HOUSE BILL NO. 181

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-SIXTH LEGISLATURE - FIRST SESSION

BY REPRESENTATIVES KAWASAKI, Gruenberg

Introduced: 3/12/09
Referred: Transportation, Judiciary

A BILL

FOR AN ACT ENTITLED

"An Act relating to the use of headlights when operating a motor vehicle."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* **Section 1.** AS 28.35 is amended by adding a new section to read:

Sec. 28.35.195. Use of headlights required. A person may not operate a motor vehicle on a highway unless the headlight system required by law for that motor vehicle is illuminated. A person who violates this section is guilty of an infraction.

Representative Scott Jiu Wo Kawasaki
Alaska State Legislature
District 9 Fairbanks

Sponsor Statement for HB 181
Let There Be Light On Alaska Roads Bill

House Bill 181 addresses a key goal of the Alaska Highway Safety Office's Strategic Highway Safety Plan. The plan recommends changing state law to require car and truck headlight use at all times. Research shows a decrease in traffic accidents where daytime running lights are used. The Alaska Highway Safety Office has determined enforcements of the headlight law could decrease head-on collisions by 7 percent to 15 percent.

The effectiveness of "headlights on" laws can be seen in Alaska on the Seward Highway. In the mid-1990s, signs were installed along the highway from Anchorage to Seward requiring motor vehicles to have headlights on at all times. The Department of Public Safety and the Department of Transportation acknowledge the effectiveness of the headlight usage with instructional signs in saving lives. According to the Department of Transportation, there was a marked decrease in the number of crashes along the Seward Highway.

Similar results have been seen in other countries located in Polar Regions like Alaska. In Sweden, which has similar climate conditions to Alaska, studies have found that the requirement to use headlights at all times reduced crash rates by 20 percent in urban areas and 17 percent in rural areas in winter months.

Currently, 39 out of 50 states, including Alaska, require use of headlights on motorcycles at all times while operating on roads. Experts report the headlights increase the conspicuousness of motorcycles, allowing other motorists to more easily see them.

House Bill 181 will increase the safety on Alaska's roadways by making all vehicles easier to see while traveling, especially during Alaska's long periods of dusk and dawn. Please join me in supporting House Bill 181 and help make Alaska a safer place to drive.

R16-XXX

Border and Legend: Black
Background: White, Fluorescent Yellow

DRAFT

Road Class	Dimensions (inches)								
	A	B	C	D	E	F	G	H	R
Minimum	60	42	0.63	0.88	3.0	6C	4.0	1.56	2.25
Conventional	84	54	0.75	1.25	4.25	8C	4.75	2.38	3.0

HH.3 Headlights On at All Times – Tier One

Description: Around 15 people die in Alaska each year in head-on crashes. National data indicate headlights-on signing and enforcement could eliminate 7 to 15 percent of these crashes.

This plan recommends changing state law to require headlights on at all times. If this is not done, we can still post signs that will make headlights mandatory on particular sections of road. 13 AAC 04.010 gives the signs the authority of law.

Responsible Agency:

Lead Agency: Alaska Department of Transportation and Public Facilities, Alaska Highway Safety Office (AHSO)

Contact Name, Title: Cindy Cashen, Highway Safety Office Administrator

Phone: (907) 465-4374 E-mail: Cindy.Cashen@alaska.gov

Necessary Partners:

- Governor's Alaska Highway Safety Office.
- DOT&PF Headquarters and Regional Offices.
- Legislature.
- Media.
- AG's Office.
- State Troopers/Local Police.
- National Insurance Institute.
- NHTSA.

Data Analysis Needs or Available Resources:

Create a statewide map of head-on collisions, insurance report, photos, past country/state success stories.

Expected Effectiveness/Outcome:

Narrative: To eliminate fatal and major injury crashes – estimate number yet to be determined.

Average number of lives lost and major injuries sustained due to this problem over the past five years: Approximately 15 per year.

Estimated number of lives saved and major injuries prevented in one year following implementation: One.

Funding and Resource Requirements:

Narrative: Funding for AHSO to cover legal costs – approximately $10K. If signs are posted, approximately $1,000 per sign.

Estimated Cost to Implement: $ TBD

Action Steps and Timeline

Action Step	Responsible Agency	Timeline/Due Date
Collect data and success stories in a draft packet for the legislature.	AHSO	December 2007
Collaborate with partners to develop a legislative information/ lobby plan.	AHSO	December 2007
Pass Legislation.	Legislature	May 2008
If successful, install signs in high-crash areas. (This could happen earlier.)		

Measurement and Evaluation

Strategy Performance Measures: Reduction in head-on collisions.

Evaluation:

Reduction in head-on collisions as indicated by before, after crash studies.

Headlights On At All Times Law (SB73 - 2009)
Estimate of Sign Cost

Community/Area	Location	No of Signs
Prudhoe Bay	Departing South, Dalton Hwy	1
Fairbanks	Departing, Steese, Parks, Richardson	3
Delta	Departing, Richardson, Alaska Hwy N&S	3
Tok	Departing, Tok Cutoff W, Alaska Hwy N&S	3
Alaska Border-Alaska Hwy	For W-bound arrivals	1
Glenallen	Departing, Glen W, Richardson N&S	3
Wasilla	Departing, Parks Hwy N	1
Palmer	Departing, Glen Hwy E	1
Valdez	Departing Richardson Hwy N	1
Glen-Parks Interchange	Departing Glen E, Glen S, Parks N	3
Anchorage	Airport	2
	Departing South-Seward Hwy	1
	Departing North, Glen Hwy	1
Kenai	Airport	1
Seward	Departing, Seward Hwy N	1
Soldotna	Airport	1
	Departing, Sterling Hwy N&S	2
Homer	Departing, Sterling Hwy N	1
Haines	Departing Haines Hwy N	1
Alaska Border-Haines	For S-bound arrivals	1
Skagway	Departing Klondike Hwy N	1
Alaska Border-Klondike	For S-bound arrivals	1
Juneau	Ferry Terminal	1
	Airport, Yandukin& Shell Simmons	2
Ketchikan	Ferry Access to Airport-both sides on Tongass	2

39 Signs

Intent:

Install signs at:
Major Airports
Major Ferry Terminals
At Major Junctions
At border crossings

We want to minimize the number of signs- just post at major entry points or junctions of high volume roads

4 Line Sign

7	ft. wide
4.5	ft. tall
31.5	s.f.
110	$/s.f.
3465	Sign Cost
$ 135,135	Total

LEGISLATIVE RESEARCH REPORT

FEBRUARY 27, 2009

REPORT NUMBER 09.154

STATE LAWS REQUIRING THE USE OF HEADLIGHTS

PREPARED FOR REPRESENTATIVE MAX GRUENBERG

BY ROGER WITHINGTON, LEGISLATIVE ANALYST

You asked about state laws requiring the use of automobile headlights while driving. Specifically, you asked what jurisdictions, if any, require the daytime use of headlights. For the jurisdictions that require daytime use of headlights, you also asked us to provide copies of the laws or regulations that require such use, as well as a sample of newspaper articles or research reports that evaluate the merits of daytime headlight use.

HEADLIGHT LAWS

According to the *2009 Digest of Motor Laws*, prepared by the American Automobile Association, all states have statutes or regulations specifying when drivers must use headlights. Sixteen states require drivers to use headlights when windshield wipers are operating (Alabama, Arkansas, California, Delaware, Illinois, Louisiana, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, and Virginia). Additionally, nineteen states require drivers to use headlights during periods of inclement weather such as snow or rain (Connecticut, Florida, Georgia, Iowa, Maine, Minnesota, Montana, New Hampshire, New Jersey, New York, North Dakota, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Utah, Vermont, West Virginia, and Wyoming). Table 1 summarizes the laws requiring the use of headlights when operating passenger vehicles in all 50 states. As you can see from Table 1, no state requires the use of headlights at all times, regardless of the weather.

907-465-3991
907-465-3908 (fax)

Alaska Legislature
Legislative Research Services
w3.legis.state.ak.us/laa/research/research.php

State Capitol
Juneau, AK 99801

Table 1: State Requirements for Headlight Use When Operating Passenger Vehicles

State	Headlights Must be Used				Maximum Sight Distance Before Headlight Use is Mandatory (in feet)
	Half Hour After Sunset and Half Hour Before Sunrise	From Sunset to Sunrise	When Windshield Wipers are Operating	During Inclement Weather	
Alabama		Yes	Yes		500
Alaska	Yes				1,000
Arizona		Yes			500
Arkansas	Yes		Yes		500
California	Yes		Yes		1,000
Colorado		Yes			1,000
Connecticut	Yes			Yes	1,000
Delaware		Yes	Yes		1,000
Florida		Yes		Yes	1,000
Georgia	Yes			Yes	500
Hawaii	Yes				200
Idaho	Yes				500
Illinois		Yes	Yes		1,000
Indiana		Yes			500
Iowa		Yes		Yes	500
Kansas		Yes			1,000
Kentucky	Yes				350
Louisiana		Yes	Yes		500
Maine	Yes		Yes	Yes	1,000
Maryland	Yes		Yes		1,000
Massachusetts	Yes		Yes		200
Michigan	Yes				500
Minnesota		Yes		Yes	500
Mississippi		Yes			500
Missouri	Yes				500
Montana	Yes			Yes	500
Nebraska	Yes				500
Nevada	Yes				1,000
New Hampshire	Yes			Yes	1,000
New Jersey	Yes		Yes	Yes	500
New Mexico	Yes				500
New York	Yes		Yes	Yes	1,000
North Carolina		Yes	Yes		400
North Dakota		Yes		Yes	1,000
Ohio	Yes				1,000
Oklahoma	Yes			Yes	500
Oregon		Yes			1,000
Pennsylvania		Yes	Yes	Yes	1,000
Rhode Island		Yes	Yes	Yes	500
South Carolina	Yes		Yes		500
South Dakota	Yes				200
Tennessee		Yes		Yes	200
Texas	Yes				1,000
Utah	Yes			Yes	1,000
Vermont	Yes			Yes	150
Virginia		Yes	Yes		500
Washington	Yes				1,000
West Virginia		Yes		Yes	500
Wisconsin	Yes				500
Wyoming	Yes			Yes	1,000

Sources: *Digest of Motor Laws*, American Automobile Association, 2009, and the National Conference of State Legislatures, (303) 364-7700.

Although your question specified the use of daytime headlight use, daytime running lights—or DRLs—are the devices that appear to be most frequently debated. As you may know, DRLs are automotive lighting device mounted on the front of a motor vehicle, that automatically switch on when the vehicle is either started or moves forward. The intent of DRLs is to increase the visibility of the vehicle.

According to the Insurance Institute for Highway Safety, DRLs are

> a low-cost method to reduce crashes. They are especially effective in preventing daytime head-on and front-corner collisions by increasing vehicle conspicuity and making it easier to detect approaching vehicles from farther away.[1]

The Insurance Institute for Highway Safety also notes that laws in Canada and many European countries require vehicles to operate with lights on during the daytime.[2] They further note that there are two types of laws: those that require vehicles to be equipped with DRLs (Canada and the United Kingdom), and those that require motorists to turn on their headlights if their vehicles do not have automatic DRLs (Europe).[3] We include the "Daytime Running Lamps" section of the Canada Motor Vehicle Safety Standard 108 as Attachment A.

You indicated in your request that you are particularly interested in a Yukon Territory law that requires full-time headlight use. In Attachment B, we include the headlight section of the Government of Yukon, Motor Vehicles Act, Chapter 153, Sections 177 through 179. Section 178(3) states that:

> No person shall operate a motor vehicle on a prescribed highway at anytime unless both headlamps are alight.

Section 178 further states that "headlamps" include daytime driving lights.

In 2003, the SWOV Institute for Road Safety Research published a report that provides an inventory of DRL laws in some European Union countries and North America.[4] The report also

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[1] According to its website, the Insurance Institute for Highway Safety is an independent, nonprofit, scientific, and educational organization dedicated to reducing the losses — deaths, injuries, and property damage — from crashes on the nation's highways. The URL for the Insurance Institute for Highway Safety is *http://www.iihs.org/default.html*.

[2] Daytime running lights are not currently required in the United States. They are, however, allowed; the Federal Motor Vehicle Safety Standard 108 (FMVSS 108) regulates all automotive lighting, signaling and reflective devices in the United States. The FMVSS 108 is administered by the United States Department of Transportation's National Highway Traffic Safety Administration. In 1995, shortly after the FMVSS 108 became effective, General Motors (GM) equipped most of its vehicles with DRLs. By 1997 GM equipped all of its vehicles with DRLs and still does so today. A number of other car manufacturers that sell automobiles in the U.S., such as Saab, Suzuki, Subaru, Volkswagen, and Volvo have gradually added DRLs to some of their models. Please keep in mind that DRLs can take several forms; DRLs can be a separate fixture on an automobile, an independent bulb within an automobile's headlight housing, or a device that turns on an automobile's low-beam headlight.

[3] Insurance Institute for Highway Safety reports that Finland first mandated daytime running lights in winter on rural roads in 1972, and ten years later made DRLs mandatory year-round. Laws in Sweden took effect in 1977, in Norway in 1986, in Iceland in 1988, and in Denmark in 1990. Laws passed in 1993 in Hungary require drivers on rural roads to operate with vehicle lights on. Laws in Canada require DRLs for vehicles made after December 1, 1989.

[4] According to its website, the SWOV Institute for Road Safety Research (*http://www.swov.nl/index_uk.htm*) is an independent, scientific institute that promotes road safety through scientific research.

details how the legislation was implemented in these countries as well as an assessment of what was learned from the implementation process. Although this report is somewhat dated, we include it as Attachment C as you may find it useful.

According to Anne Teigen, Transportation Policy Specialist, with the National Conference of State Legislatures (NCSL), a bill which would have required use of headlights while operating a motor vehicle at all times, was introduced in the Michigan Legislature in 2008. Senate Bill 1138 appears to have died without a hearing. Nevertheless, we include it as Attachment D.

As noted above, Alaska does not currently have a mandatory daytime headlight or DRL law. However, 13 AAC 04.010 (c) states that:

> Every vehicle traveling on a highway or vehicular way or area must illuminate lights when traveling on any roadway that is posted with signs requiring the use of headlights.

According to Captain Hans Brinke with the Alaska State Troopers, the Seward Highway is the only highway currently posted for daytime headlight use.[5]

DAYTIME HEADLIGHT OR RUNNING LIGHT RESEARCH

A number of research reports assess the effectiveness of daytime headlight or running light use. Generally, daytime headlight or running lights appear to reduce accident rates, although the evidence is still in dispute.

Daytime headlight or running lights help reduce the number of traffic accidents by allowing other road users to be seen earlier, even in bad weather or traffic conditions. Pedestrians and cyclists see approaching vehicles better, and the lights increase the contrasts between vehicles and background that may otherwise be difficult to discern, due to, for example, clouds, sun glare, or areas with dense vegetation.

Some of the concerns regarding daytime headlight or running lights pertain to the possible safety limitations, such as turn signal masking by adjacent high-intensity DRLs; a potential reduction in motorcycle safety since motorcycles are no longer the only vehicles displaying headlights during the day; and shortened bulb life and higher fuel consumption.

We include the following three documents that discuss the safety benefits of daytime headlight or running light use.

In September 2004, the U.S. Department of Transportation, National Highway Traffic Safety Administration issued a technical report entitled "An Assessment of the Crash-Reducing Effectiveness of Passenger Vehicle Daytime Running Lamps (DRLs)." This study estimates the effectiveness of passenger vehicle daytime running lights in reducing two-vehicle opposite direction crashes, pedestrian/bicycle crashes, and motorcycle crashes. The significant results of this study show that from 1995 to 2001:

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[5] Captain Hans Brinke, Department of Public Safety. Alaska State Troopers can be contacted at 907-269-5682.

- DRLs reduced opposite direction daytime fatal crashes by 5 percent.
- DRLs reduced opposite direction/angle daytime non-fatal crashes by 5 percent.
- DRLs reduced non-motorists, pedestrians and cyclists, daytime fatalities in single-vehicle crashes by 12 percent.
- DRLs reduced daytime opposite direction fatal crashes of a passenger vehicle with a motorcycle by 23 percent.

We include this report as Attachment E.

In 2008 the SWOV Institute for Road Safety Research published a Fact Sheet that provides a summary of DRL issues. Included in the Fact Sheet are numerous cites to research reports that various countries have used when considering DRL laws. We include this Fact Sheet as Attachment F.

In 2006 *Business Week* summarized some of the major research reports on the effectiveness of DRLs. Nearly all of these reports indicate DRLs reduce multiple-vehicle daytime crashes. We include this article as Attachment G; samples of the reports noted by *Business Week* are as follows.

- A study examining the effect of Norway's DRL law from 1980 to 1990 found a 10 percent decline in daytime multiple-vehicle crashes. (R. Elvik, "The Effects on Accidents of Compulsory Use of Daytime Running Lights for Cars in Norway," *Accident Analysis and Prevention* 25:383-98, 1993)
- A Danish study reported a 7 percent reduction in DRL-relevant crashes in the first 15 months after DRL use was required and a 37 percent decline in left-turn crashes. (L.K. Hansen, "Daytime Running Lights in Denmark: Evaluation of the Safety Effect," Danish Council of Road Safety Research, 1993.)
- In a second study covering 2 years and 9 months of Denmark's law, there was a 6 percent reduction in daytime multiple-vehicle crashes and a 34 percent reduction in left-turn crashes. (L.K. Hansen, "Daytime Running Lights: Experience with Compulsory Use in Denmark," Proceedings of the Fersi Conference, Lille, Denmark, 1994.)
- A 1994 Transport Canada study comparing 1990 model year vehicles with DRLs to 1989 vehicles without them found that DRLs reduced relevant daytime multiple-vehicle crashes by 11 percent. (H. Arora, D. Collard, G. Robbins, E.R. Welbourne, and J.G. White; "Effectiveness of Daytime Running Lights in Canada," Report No. TP-12298, Transport Canada, 1994.)

I hope you find this information to be useful. Please do not hesitate to contact us if you have questions or need additional information.

LIST OF ATTACHMENTS

Attachment A

Motor Vehicle Safety Act, Motor Vehicle Safety Regulations (C.R.C., c. 1038), SCHEDULE IV (Sections 2, 5 and 6 and subsection 12(3)), Canada Department of Justice, *http://laws.justice.gc.ca/en/ShowDoc/cr/C.R.C.-c.1038/sc:4::sc:5//en?page=11&isPrinting=false*

Attachment B

Government of Yukon, Motor Vehicles Act, Chapter 153, Sections 177 through 179, *http://www.gov.yk.ca/legislation/pages/page_a.html*

Attachment C

Jacques Commandeur, *State of the Art with Respect to Implementation of Daytime Running Lights*, SWOV Institute for Road Safety Research, 2004, *http://www.swov.nl/index_uk.htm*

Attachment D

Senate Bill 1138, Michigan State Legislature, 2008, *http://www.legislature.mi.gov/(S(sapn303cev1ccufuvn2pjtip))/mileg.aspx?page=getObject&objectName=2008-SB-1138*

Attachment E

Joseph M. Tessmer, "An Assessment of the Crash-Reducing Effectiveness of Passenger Vehicle Daytime Running Lamps (DRLs)," U.S. Department of Transportation, National Highway Traffic Safety Administration, Mathematical Analysis Division, National Center for Statistics and Analysis, September 2004, *http://www-nrd.nhtsa.dot.gov/Pubs/809760.PDF*

Attachment F

SWOV Fact Sheet, "Daytime Running Lights (DRL)," SWOV Institute for Road Safety Research, 2004, *http://www.swov.nl/index_uk.htm*

Attachment G

"Q&A: Daytime Running Lights," *Business Week*, December 2005, *http://www.businessweek.com/autos/content/jan2006/bw20060103_179336.htm*

Motor Vehicle Safety Act

Motor Vehicle Safety Regulations (C.R.C., c. 1038),

SCHEDULE IV (Sections 2, 5 and 6 and subsection 12(3))

Canada Department of Justice

http://laws.justice.gc.ca/en/ShowDoc/cr/C.R.C.-c.1038/sc:4::sc:5//en?page=11&isPrinting=false

Daytime Running Lamps

General

(44) Every bus, multi-purpose passenger vehicle, passenger car, three-wheeled vehicle and truck shall be equipped with two daytime running lamps or, where the daytime running lamps are optically combined with the upper beams of the headlamps, with two or four daytime running lamps.

(45) A daytime running lamp shall be white, yellow or white to yellow, in accordance with sections 3.1.3, 3.1.2 and 3.1.3.1, respectively, of SAE Standard J578, Color Specification (May 1988).

(46) A daytime running lamp that is not optically combined with a headlamp shall conform to SAE Recommended Practice J575, Tests for Motor Vehicle Lighting Devices and Components (December 1988).

(47) Subject to subsection (47.1), a daytime running lamp that is not optically combined with another lamp or is optically combined with a lamp, other than a front fog lamp, that is not required by this section shall be designed to conform to SAE Recommended Practice J2087, Daytime Running Lamps for Use on Motor Vehicles (August 1991), including the photometric values set out in Table 2 of this Recommended Practice, except that

(a) the maximum luminous intensity at any test point shall be 3 000 cd;

(b) the lamp is not required to conform to section 6.2 of that Recommended Practice; and

(c) the effective projected luminous lens area of the lamp may be less than 40 cm2.

(47.1) A daytime running lamp that is not optically combined with another lamp may conform to SAE Standard J583, Front Fog Lamps (June 1993), or to sections 3, 4.2, 4.3, 5 and 6 of ECE Regulation No. 19, Uniform Provisions Concerning the Approval of Motor Vehicle Front Fog Lamps, Revision 3 (March 2, 1993).

(47.2) A daytime running lamp that is optically combined with a front turn signal lamp or a parking lamp shall conform to subsection (47).

(48) A daytime running lamp that is optically combined with a headlamp shall

(a) where combined with the lower beam of a headlamp that is designed to conform to the photometric requirements of this section, operate at normal operating voltage or

(i) in the case of a DC system, not less than 75 per cent and not more than 92 per cent of the normal operating voltage, and

(ii) in the case of an AC system or a modulated voltage system, the equivalent root mean square of not less than 75 per cent and not more than 92 per cent of the normal operating voltage;

(b) where combined with the lower beam of a headlamp that is designed to conform to the photometric requirements of section 108.1, operate at normal operating voltage or

(i) in the case of a DC system, not less than 86 per cent and not more than 92 per cent of the normal operating voltage, and

(ii) in the case of an AC system or a modulated voltage system, the equivalent root mean square of not less than 86 per cent and not more than 92 per cent of the normal operating voltage; and

(c) where combined with the upper beam of a headlamp, be designed to provide a luminous intensity of not less than 2 000 cd and not more than 7 000 cd at test point H-V.

(49) For the purpose of determining if a daytime running lamp conforms to subsection (48), the daytime running lamp shall be tested in accordance with section S11 of TSD 108.

(50) A daytime running lamp that is optically combined with a headlamp or headlamps in which two filaments operate together to provide the daytime running lamp function shall meet the photometric requirements of paragraph (48)(c) when

(a) the daytime running lamp is provided by

(i) an upper beam that is provided by two filaments in the headlamp,

(ii) an upper beam and a lower beam of the headlamp, or

(iii) an upper beam of the headlamp, and a lower beam or upper beam of another headlamp; and

(b) the luminous intensities at the test point H-V of each headlamp, tested in accordance with section S10 of TSD 108, are added together.

(51) Where a daytime running lamp is optically combined with a headlamp that is activated in its concealed position, the daytime running lamp shall conform to subsection (47), (48) or (50).

(52) A daytime running lamp may be optically combined with a front fog lamp that conforms to SAE Standard J583, Front Fog Lamps (June 1993) or to sections 3, 4.2, 4.3, 5 and 6 of ECE Regulation No. 19, Uniform Provisions Concerning the Approval of Motor Vehicle Front Fog Lamps, Revision 3 (2 March 1993).

(53) Despite subsections (45) to (52), a vehicle may be equipped with a daytime running light system that conforms to Canadian Standards Association Standard CAN/CSA-D603-88, Daytime Running Light Systems (April 1988), other than a Type 4 and Type 5 system (reduced voltage upper beam headlamps), as indicated in Table 1 of the Standard, if

(a) the daytime running light system components are installed in accordance with the instructions referred to in section 8.2 of the Standard; and

(b) where the vehicle is equipped with gaseous-discharge lower beam headlamps, only a Type 1 system (normal voltage lower beam headlamp) or a Type 6 or Type 7 system (separate lamps other than headlamps), as indicated in Table 1 of the Standard, is used.