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UNFINISHED BUSINESS

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Bill No: SB 480  
Author: Archuleta (D)  
Amended: 6/26/25 in Assembly  
Vote: 21

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SENATE TRANSPORTATION COMMITTEE: 14-0, 3/25/25  
AYES: Cortese, Strickland, Archuleta, Arreguín, Blakespear, Cervantes,  
Gonzalez, Grayson, Limón, Menjivar, Richardson, Seyarto, Umberg, Valladares  
NO VOTE RECORDED: Dahle

SENATE APPROPRIATIONS COMMITTEE: Senate Rule 28.8

SENATE FLOOR: 39-0, 5/27/25  
AYES: Allen, Alvarado-Gil, Archuleta, Arreguín, Ashby, Becker, Blakespear,  
Cabaldon, Caballero, Cervantes, Choi, Cortese, Dahle, Durazo, Gonzalez,  
Grayson, Grove, Hurtado, Jones, Laird, Limón, McGuire, McNerney, Menjivar,  
Niello, Ochoa Bogh, Padilla, Pérez, Richardson, Rubio, Seyarto, Smallwood-  
Cuevas, Stern, Strickland, Umberg, Valladares, Wahab, Weber Pierson, Wiener  
NO VOTE RECORDED: Reyes

ASSEMBLY FLOOR: 74-0, 8/28/25 (Consent) - See last page for vote

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**SUBJECT:** Autonomous vehicles

**SOURCE:** Author

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**DIGEST:** Authorizes an autonomous vehicle to be equipped with automated driving system (ADS) marker lamps.

*Assembly Amendments of 6/26/25 make technical conforming changes.*

**ANALYSIS:**

Existing law:

- 1) Authorizes the operation of autonomous vehicles (AVs) on public roads for testing purposes under certain circumstances specified in the Department of Motor Vehicles' (DMV) regulations.
- 2) Defines "autonomous vehicle" to mean vehicle equipped with technology that makes it capable of operation that meets the definition of Levels 3, 4, or 5 of the SAE International's Taxonomy and Testing of Autonomous Vehicles Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles, standard J3016 (APR 2021).
- 3) Requires the color of lamps and reflected light from all reflectors, visible from the front of the vehicle, to be white or yellow (with exceptions) and for light emitted from the rear of a vehicle to be red (with exceptions).

This bill:

- 1) Defines "ADS marker lamp" to mean a device that emits a light to indicate when an ADS is engaged in the operation of the vehicle.
- 2) Requires the ADS marker lamp to be in accordance with SAE International's standards.
- 3) Exempts ADS marker lamps from having to be white or yellow in the front of a vehicle and red in the back of a vehicle.

## Comments

- 1) *Purpose of this bill.* According to the author, "As technology on roads continues to evolve, we have a greater number of vehicles equipped with driver-assisting technology. While vehicle manufactures have adopted technologies like adaptive cruise control and lane-keeping assistant systems many are looking to transition into autonomous driving systems. These systems are intended to improve our commutes and reduce hazardous situations on the roads. However in order to ensure the public and law enforcement are aware of these systems while they're in use, manufactures equipping their vehicles with autonomous driving systems should be allowed to install marker lamps on the outside of their vehicle to clearly communicate with pedestrians and law enforcement when a vehicle's automated driving system is activated. Such recommendations were made by the SAE, National Highway Traffic Safety Administration (NHTSA), and the American Association of Motor Vehicle Administrators (AMVA). Authorizing vehicles with automated driving systems to be equipped with marker lamps will strengthen public safety and promote

acceptance of automated driving systems by clearly communicating to pedestrians, law enforcement, and other road users when the systems are engaged.”

- 2) *AV's in California:* In 2012, the Legislature passed SB 1298 (Padilla, Chapter 570) which permitted AVs to operate on public roads for testing by a driver under certain conditions. In 2014, DMV released regulations to allow for testing AVs with a test driver. In April 2018, the DMV finalized regulations for the testing and deployment of AVs on public roads without a driver. Approximately 30 companies currently have a testing permit with a driver and seven companies have received an AV permit for testing without a driver. Only three companies currently have a valid driverless deployment permit.
- 3) *Industry Guidance:* As AV technology has continued to evolve and more testing has been carried out, entities such as NHTSA and SAE have released a number of guidance documents to assist with the ongoing development of AV vehicles and its technology. These documents include research and recommendations on best practices in a variety of areas including, but not limited to, system safety, vehicle cybersecurity, and human machine interface. Additionally, entities such as SAE International have also studied, evaluated, and established a variety of industry standards that may be utilized by manufactures when designing and building AVs. Specific to this measure, SAE International standard J3134 provides details and recommendations on standardize ADS lamp signals for safety purposes. J3134 specifically studied / evaluated visible marker lamps (not flashing or sweeping) with a recommendation of a blue-green light for ADS lamp signals to indicate when the AV's automated driving system is on / engaged.

NHTSA has yet to require AVs to have ADS marker lamps. This bill does not require AVs to have these marker lamps, but rather authorizes them to use the ADS marker lamps so they are not in violation of California law, which currently requires front lights to be white or yellow and rear lights to be red.

**FISCAL EFFECT:** Appropriation: No Fiscal Com.: Yes Local: No

According to the Assembly Appropriations Committee: Negligible state costs, if any.

**SUPPORT:** (Verified 8/28/25)

Abate of California - Motorcyclists Rights & Safety Organization  
Alliance for Automotive Innovation  
Consumers for Auto Reliability & Safety

**OPPOSITION:** (Verified 8/28/25)

None received

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8/28/25 16:50:07

\*\*\*\* **END** \*\*\*\*