



In North America since 1986, a central brake lamp, mounted higher than the vehicle's left and right brake lamps and called a **Centre High Mount Stop Lamp (CHMSL)**, is also required. The CHMSL is also sometimes referred to as the **centre brake lamp**, the **3rd brake Lamp**, the **eye-level brake lamp**, the **safety brake lamp**, the **high-level brake lamp** or, in the U.S., as the **Dole light** or **Liddy light** (after Elizabeth "Liddy" Dole, who as Transportation Secretary endorsed the introduction of the lights <sup>1</sup>). The CHMSL may produce light by means of a single central filament bulb, a row or cluster of filament bulbs or LEDs, or a strip of Neon tube.

### **Rationale**

The stop lamps on vehicles are traditionally placed in the same housing as the tail lights and turn signals. The CHMSL provides a deceleration warning to following drivers, whose view of the braking vehicle's regular stop lamps is blocked by interceding vehicles. It also helps to disambiguate brake vs. turn signal messages in North America, where red rear turn signals identical in appearance to brake lamps are permitted, and also provides a backup brake lamp in the event of a brake lamp malfunction. The CHMSL is required to illuminate steadily; it is permitted to flash for a time (Not Constantly) for less than three (3) seconds and more in certain cases under severe braking.

In traffic situations where vehicles in front have rear glass that isn't tinted, the CHMSL from the vehicle two or more cars ahead, in many cases, can be seen by vehicles following, allowing following drivers to anticipate traffic conditions without having to rely on the vehicle directly in front.

### **Placement**

On passenger cars, the CHMSL may be placed above the back glass, affixed to the vehicle's interior just inside the back glass, or it may be integrated into the vehicle's deck lid or into a spoiler. Other specialized fitments are sometimes seen; the Land Rover Freelander has the CHMSL on a stalk fixed to the spare wheel carrier. Trucks, vans and commercial vehicles sometimes have the CHMSL mounted to the trailing edge of the vehicle's roof. The CHMSL is required by regulations worldwide to be centered laterally on the vehicle, though ECE R48 permits lateral offset of up to 15 cm if the vehicle's lateral centre is not coincident with a fixed body panel, but instead separates movable components such as doors. The Renault Master van, for example, uses a laterally offset CHMSL for this reason. The height of the CHMSL is also regulated, in absolute terms and with respect to the mounting height of the vehicle's conventional left and right brake lamps. Depending on the left and right lamps' height, the CHMSL isn't always mounted relatively very high; its lower edge may be just above the left and right lamps' upper edge.