Pioneers of Commercial Vehicle Safety

For more than 20 years, Meritor WABCO has driven innovation across the commercial vehicle industry by continuously introducing advanced technologies that enhance the safety and performance of fleets across North America. As a part of its Driver Assistance Systems, Meritor WABCO designed OnGuard, a Collision Mitigation System, to help detect and avoid potential rear-end collisions, keeping drivers and fleets safe on the road.

OnGuard, Your Co-Pilot on The Road

OnGuard is a radar-based Collision Mitigation System that offers Forward Collision Warning, Active Braking and Adaptive Cruise Control (ACC). OnGuard detects objects ahead and assists the driver in recognizing and responding to potentially dangerous driving scenarios that could lead to a rear end collision. OnGuard is always monitoring the road and provides warnings and active braking when deemed necessary, even when cruise control is not set. When an impending collision is detected, OnGuard has the ability to provide audible, visual and haptic warnings, automatically reduces engine torque and applies the foundation brakes to help avoid or mitigate a collision.

Cutting Edge Radar Technology

OnGuard uses forward-looking radar with cutting edge dual-beam technology to detect objects in your vehicle’s path at distances up to 650 feet away. The dual beam radar uses far-range and near-range detection to expand the total area of radar coverage. This provides fast and accurate detection of objects far ahead while covering a wider angle to check adjacent freeway lanes for vehicles.

Not all collision mitigation systems are created equal. OnGuard’s 77 GHz radar provides fast data processing, long range, and accurate object recognition while maintaining its performance in harsh weather and all lighting conditions. These are important aspects that optimize safety margins.

Forward Collision Warning, Multiple Layers of Protection

At Meritor WABCO, our ultimate goal is your safety. That is why OnGuard offers three levels of warnings to alert you to potential rear-end collisions. The system provides audible beeps and visual warnings on the OnGuard display when it detects a potential rear-end accident. It also provides an industry-exclusive haptic warning which is a quick pulse of braking felt when a collision danger is present to accelerate the driver’s response to imminent collisions.

Stationary Objects Alert, Watching Out For You

OnGuard adds another layer of protection by sending audible and visual warnings when it detects a stationary object obstructing your lane, such as disabled cars, to help drivers react faster to possible dangers ahead.

Adaptive Cruise Control, Keeping Your Pace

OnGuard’s Adaptive Cruise Control (ACC) offers a multitude of safety and convenience benefits. The system looks at the traffic ahead and adapts the vehicle’s speed accordingly. It helps maintains a safe following distance between your vehicle and the vehicle ahead. OnGuard ACC not only makes driving those long hours a more relaxed and pleasant experience, but also a safer one.

Active Braking, Smart Choices

If OnGuard detects a rear-end collision is developing without the driver taking action to decelerate the vehicle, the system automatically de-throttles the engine and applies foundation brakes to provide up to 50% braking power to help mitigate or prevent a collision. Adaptive Cruise Control also uses engine and Active Braking to reduce your vehicle’s speed to maintain a safe following distance between your vehicle and the vehicle ahead.
A Powerful Collision Mitigation System that’s Always-On

- Forward Collision Warning alerts the driver to possible rear-end collisions by providing audible, visual and haptic warnings
- Collision Mitigation & Active Braking helps the driver in responding to potential rear-end collision by braking when necessary
- Adaptive Cruise Control assists the driver to maintain a safe following distance between their vehicle and vehicles ahead
- Stationary Object warning provides you with added safety to alert drivers to obstructions in their lane, such as disabled vehicles

OnGuard Helps Increase Your Fleet’s Safety

- Government conducted research suggest that collision mitigation systems reduce annual rear-end accident rates by up to 44%*
- OnGuard-equipped fleets have reported up to 87% rear-accident reduction as well as major reductions in fatal and injury accidents
- Decreases the severity of rear-end collisions
- Encourages drivers to maintain safe following distances and avoid tailgating

Enhance your ROI

- Experience payback periods as low as 12 months for collision mitigation systems installed on commercial vehicles**
- Adaptive Cruise Control contributes to your fuel savings as well as decreases wear and tear on your vehicle’s brakes by reducing engine torque and applying engine brakes to reduce your vehicle’s speed
- A protective fascia covers the OnGuard radar to protect it from damage and minimize snow and ice buildup, making the radar more robust
- Continuous auto-alignment of the radar saves time and money for the fleets

* As reported by FMCSA, Onboard Safety Systems Effectiveness Evaluation, 2013
** As reported by FMCSA, Analysis of Benefits and Costs of Forward Collision Warning Systems, 2009

For more information, call 866-668-7221 or visit www.meritorwabco.com.