

BENDIX™ VORAD® VS-500 SYSTEM

Combining forward collision warning and adaptive cruise control technologies, the Bendix™ VORAD® VS-500 technologies may help drivers take split-second evasive actions to help them mitigate accidents and improve highway safety.

Fleets using VORAD have reported up to 74% fewer accidents,* helping protect lives, property, and businesses.

Our proven technology may help fleets and owner-operators:

- Lower repair expenses and limit costly downtime
- Reduce insurance claims
- Lower liability and out-of-pocket insurance costs
- Improve driver morale and safety consciousness

Helping Alert Drivers of Potential Trouble Ahead

Using a forward-looking radar, the system sees moving and stationary metallic objects up to 500 feet ahead of the vehicle. It's a fact ... sometimes the driver may look away from the road at the wrong time. VORAD is there to help warn him or her when a collision with the forward vehicle is likely. If the vehicle ahead slows rapidly and the truck with VORAD is likely to make impact, the driver will be alerted with an **Impact Alert** so they can apply the foundation brakes or steer to potentially avoid it.

Contained in a durable housing, the forward-looking radar unit mounts to, or behind, a standard front bumper. The system also provides **Following Distance Alerts** that typically notify the driver when they are behind a forward vehicle at 3.0, 2.0 and 1.0 seconds. Plus, a **Stationary Object Alert** lets the driver know if a large metallic object may be blocking their lane of travel...a valuable feature when traveling in low light, or where driving condition visibility may be hampered.

Since VORAD can also be integrated with SafetyDirect® by Bendix CVS, the system can provide insightful data to help the fleet in driver training and operational efforts.

The **Bendix™ SmartCruise® Adaptive Cruise Control** is integrated with the vehicle's forward-looking radar and automatically adjusts vehicle speed by reducing the throttle and engaging the engine retarder to help the driver maintain a safe following distance. (NOTE: Bendix SmartCruise does NOT apply the vehicle brakes.)



Bendix™ SmartCruise®
Forward-Looking Radar



Driver Interface Unit (DIU)

VORAD System Components

Driver Interface Unit (DIU) – The DIU provides visual and audible alerts for the driver when needed.

Bendix™ SmartCruise® Forward-Looking Radar – Adaptive cruise control system. When cruise control is set, helps drivers potentially avoid front- and rear-end collisions by automatically reducing engine speed when vehicles are too close. It reduces the throttle and engages the engine retarder. (Note: Bendix VORAD SmartCruise does not apply the brakes.)

*Eaton industry research

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System Comparison

Bendix® Wingman® Fusion™
 Bendix® Wingman® Advanced
 Bendix™ VORAD® VS-500



Feature

Alerts

- Following Distance Alerts - audible and visual alerts which let driver know when getting too close to the forward vehicle ■ ■ ■
- Impact Alert - audible and visual warning to the driver that a collision with the forward vehicle is likely and that they should address the situation immediately ■ ■ ■
- Stationary Object Alert - audible and visual warning to the driver when a metallic object(s) may be blocking lane of travel ■ ■ ■

Adaptive Cruise Control with Braking (functions when cruise control is on and speed is set)

- Reduces throttle and engages engine retarder to help the driver maintain a set following distance behind a forward vehicle ■ ■ ■
- Applies foundation brakes to help the driver maintain a set following distance behind a forward vehicle ■ ■

Electronic Stability System (ESP) & Autonomous Emergency Braking (AEB)

- Bendix® ESP® full stability system helps drivers mitigate rollovers and loss-of-control situations on wet and dry roadways ■ ■
- Provides audible and visual alerts to the driver and applies the brakes when the system determines a collision with forward vehicle is imminent ■ ■

Additional Features

- Integration with SafetyDirect® ■ ■ ■
- Retrofittable ■ ■ ■



Bendix safety technologies complement safe driving practices. No commercial vehicle safety technology replaces a skilled, alert driver exercising safe driving techniques and proactive, comprehensive driver training. Responsibility for the safe operation of the vehicle remains with the driver at all times.