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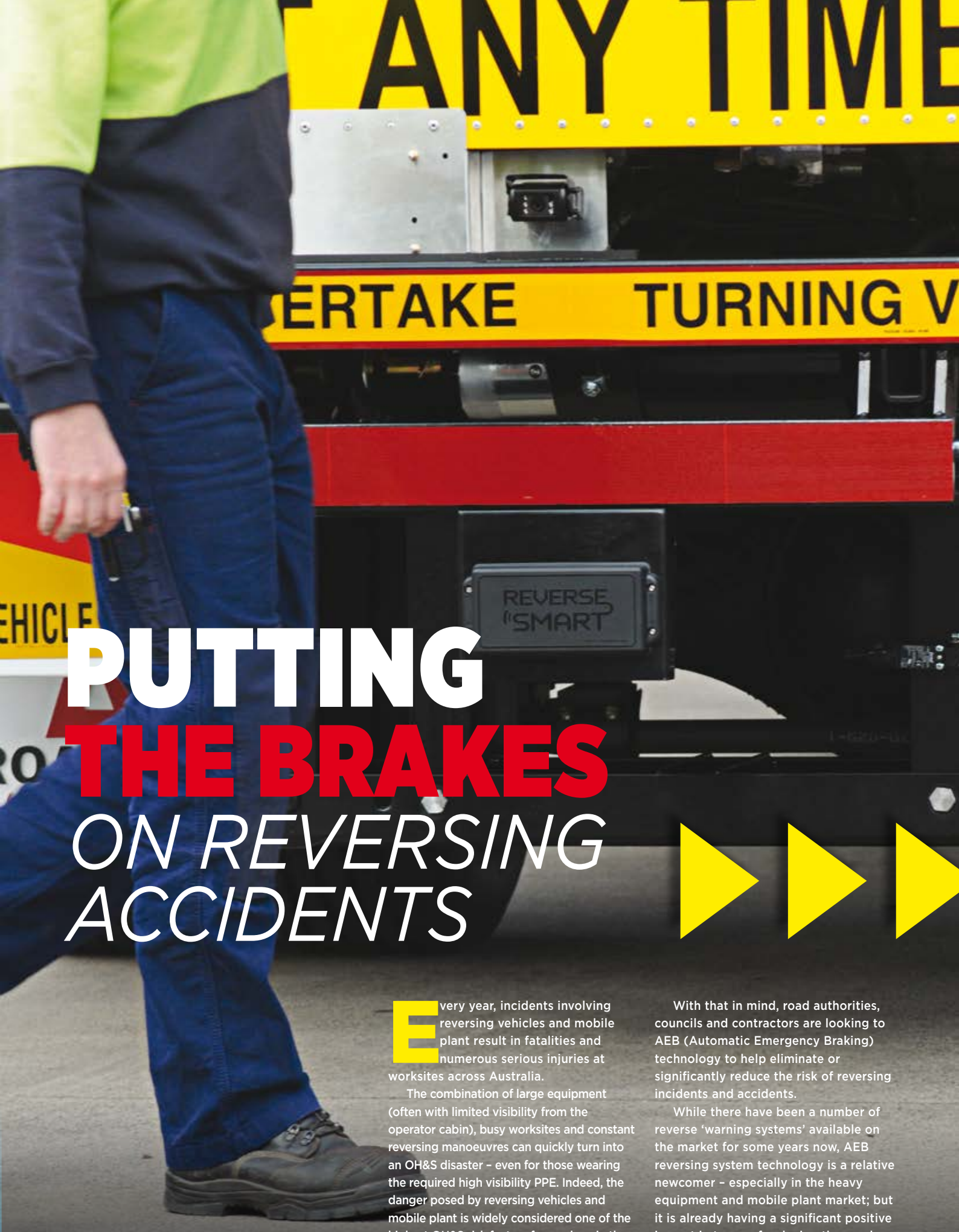
REVERSE SMART

PUTTING THE BRAKES ON REVERSING ACCIDENTS



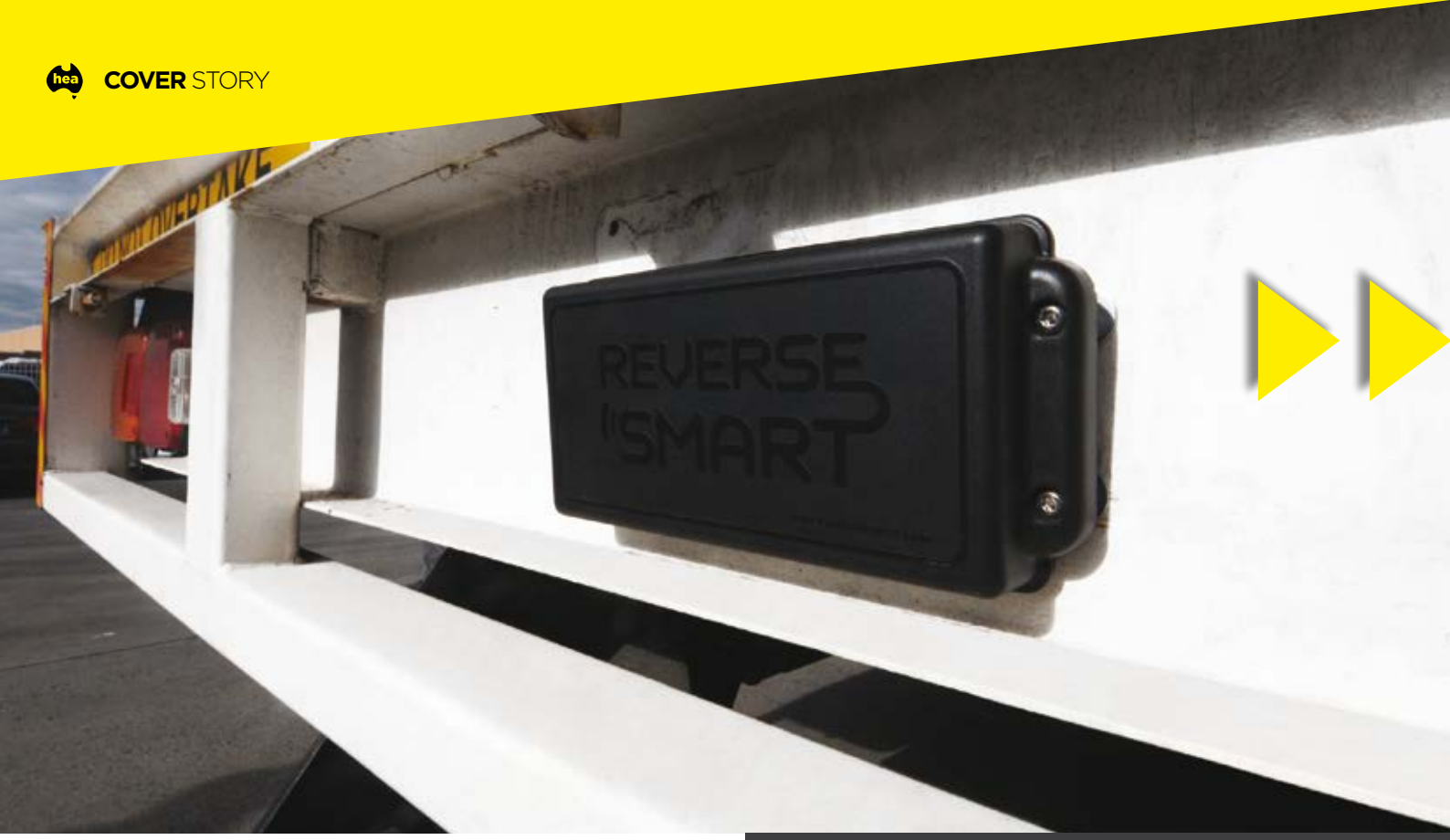
PUTTING THE BRAKES ON REVERSING ACCIDENTS

Every year, incidents involving reversing vehicles and mobile plant result in fatalities and numerous serious injuries at worksites across Australia.

The combination of large equipment (often with limited visibility from the operator cabin), busy worksites and constant reversing manoeuvres can quickly turn into an OH&S disaster – even for those wearing the required high visibility PPE. Indeed, the danger posed by reversing vehicles and mobile plant is widely considered one of the highest OH&S risk factors for workers in the road construction and maintenance sectors.

With that in mind, road authorities, councils and contractors are looking to AEB (Automatic Emergency Braking) technology to help eliminate or significantly reduce the risk of reversing incidents and accidents.

While there have been a number of reverse 'warning systems' available on the market for some years now, AEB reversing system technology is a relative newcomer – especially in the heavy equipment and mobile plant market; but it is already having a significant positive impact in terms of reducing the number of incidents.



Reverse Smart: State-of-the-art radar technology

Reverse Smart has been at the forefront of AEB reversing system technology for a number of years throughout Europe and the UK, with many hundreds of successful installations on heavy vehicles, large plant and other mobile equipment.

Building on this success, Reverse Smart now looks set to change the face of worksite safety throughout Australia. Speaking about the Reverse Smart system, Davin Hamnett, Business Development Manager with Reverse Smart explained:

"One of the main benefits of the Reverse Smart system, is that it provides an engineering control to avoid an impact, rather than relying on driver / operator response times."

"On most worksites, there is usually a myriad of equipment operating, most of which has flashing lights, beacons, cameras and reversing buzzers or other audible warnings. In short, there is usually a lot going on and there's too much external stimulus to pay attention to all of it – especially when you're trying to concentrate on the job at hand," he said.

"While from the outside looking in, it may seem almost impossible to miss a large piece of equipment moving towards you, in reality, impact accidents occur with alarming regularity – and this often results in serious injuries or even fatalities.

By providing an additional level of protection, including an engineering control that can stop the vehicle, the Reverse Smart system can significantly reduce the risk of impacts and injuries," Davin Hamnett added.

The Reverse Smart AEB system has been specifically designed to reduce the incidents of large vehicles or mobile plant impacting workers or objects while reversing. The Reverse Smart AEB detects objects or people behind the vehicle, warns the driver / operator and, unless the driver confirms the nature of the object and specifically triggers the 'sleep' mode (which is used when intentionally reversing up to a solid object), applies the vehicles brakes.

WHAT THE OPERATORS SAID ABOUT REVERSE SMART

As is the case with any additional technology being added to a vehicle or piece of plant, the operators' opinion of Reverse Smart was a critical factor in its success. Drivers and operators do not want or need an extra level of complexity added to their equipment.

Operator feedback about the Reverse Smart system has been universally positive, with drivers praising the unit for both its performance and practicality, and the fact that it doesn't require additional maintenance or calibration and doesn't interfere with their normal operation of the vehicle.

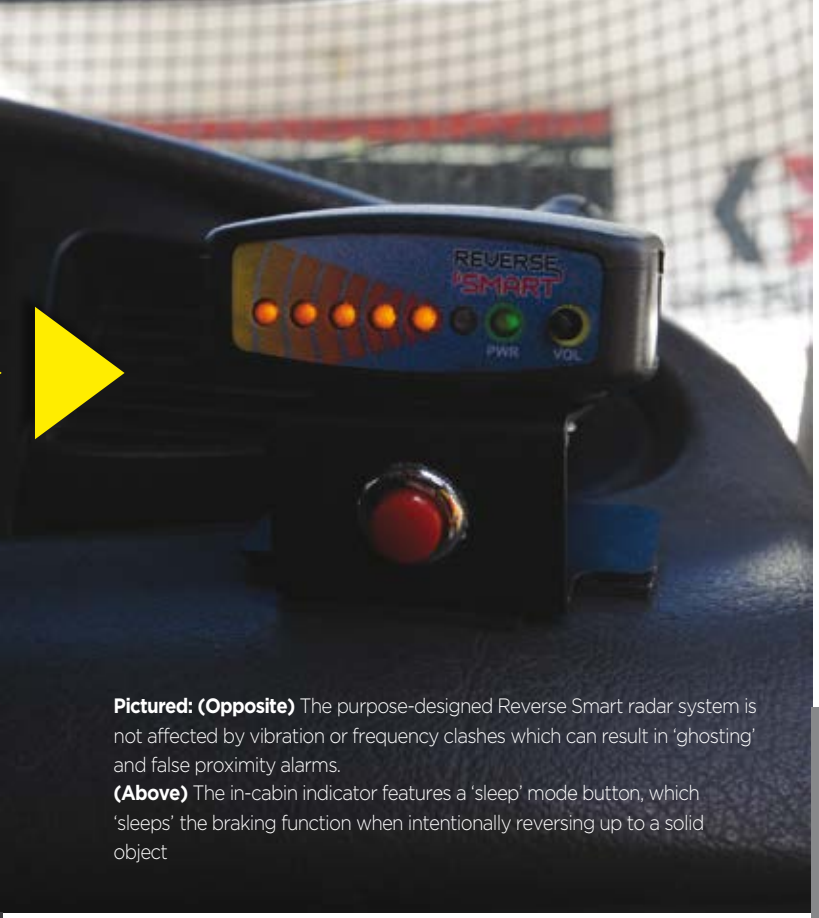
"Have felt safe while reversing when I know there is foot traffic about"

"I am more cautious when reversing"

"It works like an extra pair of eyes"

The VicRoads trial also required the operators to complete a Likert Scale Effectiveness and Usability questionnaire about the Smart Reverse system. The operators provided positive feedback to the eleven questions, with all agreeing that '... automatic braking technology should be considered for further use across our industry' and that '...in understanding that Reverse Smart could apply the brake, they were more aware when reversing'.

Reference: VicRoads Worksite Safety Update No 133 (April-May 2015)



Pictured: (Opposite) The purpose-designed Reverse Smart radar system is not affected by vibration or frequency clashes which can result in 'ghosting' and false proximity alarms.
(Above) The in-cabin indicator features a 'sleep' mode button, which 'sleeps' the braking function when intentionally reversing up to a solid object

The key to the success of the Reverse Smart system lies within its purpose-designed radar, which not only allows for an accurately focussed detection area, but also overcomes many of the limitations that can be experienced by traditional ultrasonic detection. Davin Hamnett explained:

"Unlike ultrasonic reversing detection - which is a common feature on many passenger vehicles – the Reverse Smart radar system is not affected by vibration or frequency clashes which can result in 'ghosting' and false proximity alarms."

"In addition, the fact that the radar unit is a purpose-built, heavy duty, fully-sealed unit, means that it is unaffected by dust and dirt and is suitable for use in even the harshest operating environments," he said.

"It's extremely robust, and maintenance free," he added. "The driver or operator doesn't have to change the way they operate the equipment and there are no additional steps required to operate or calibrate the Reverse Smart system once it has been installed."

"The only driver interaction with the system is when they are intentionally reversing up close to a solid object, in which instance they can press a button to 'sleep' the braking function while still maintaining the proximity detection alert," Davin Hamnett added.

Proven Performance in the Field

Available exclusively throughout Australia from safety, traffic control and line marking equipment specialists A1 Roadlines, the Reverse Smart AEB system is already proving popular with Australian equipment owners and operators alike, with outstanding performance both in the field and during a recent VicRoads safety system assessment trial.

The trial, which commenced in mid-February this year, involved a full in-service evaluation of two Reverse Smart AEB units. The first unit was installed on a SprayLine Cover Truck located at a regional depot, while the second was installed on a Road Services Patrol Truck at a Melbourne metropolitan depot.

The trial has been extremely successful in terms of both the units' performance and operator acceptance of the system. Indeed, drivers have been very supportive of the technology and agree that it benefits their daily work activities and has even helped to increase their awareness and care while reversing.

Not surprisingly, positive feedback from both the VicRoads trial and a series of live demonstrations has resulted in a flood of inquiries and strong demand for the Reverse Smart system from across the road maintenance and construction industry.

For further information, or to arrange a demonstration, please visit: www.reversesmart.com.au or contact:
Davin Hamnett, Reverse Smart, Ph: 0419 177 199
or A1 Roadlines Pty Ltd, Ph:1300 217 623 (1300 A1ROAD)

WHY THE NEED FOR AEB DEVICES?

The Victorian Transport Accident Commission (TAC) ran a campaign in regards to the benefits of AEB (Automatic Emergency Braking) devices, which highlighted the need for engineering controls to assist in the reduction of vehicle-based accidents. This is primarily due to the fact that traditional reversing aid devices such as ultrasonic rear sensors and reversing cameras are reliant on the driver's reaction to an external stimulus to avoid an impact event.

Needless to say, these concerns are multiplied with heavy vehicles and large mobile equipment, especially in operating conditions such as those experienced in the road construction / maintenance industries where workers are often in close proximity to heavy mobile equipment.

The Reverse Smart AEB system has been specifically designed to address these issues, significantly reducing the risk of an impact injury.