

NZ Trucking Tips with Dave – on the MAX-SAFE Anti-Rollaway Brake System

1. What is the MAX-SAFE Anti-Rollaway Brake System™?

The MAX-SAFE Anti-Rollaway Brake System is an active safety solution that applies the park brake if a driver doesn't fully apply the park brake.

It's designed to provide a safer working environment by stopping a vehicle from rolling away – either forwards or backwards.

It works on any vehicle over 4.5 tonne, so light rigid vehicles through to all types of heavy vehicles – trucks, construction and mining vehicles, even buses.

It was developed because there were too many accidents where a driver was run over by their own vehicles, or nearby workers were run over by a vehicle or pinned between a vehicle and a building, such as on a loading dock.

There were situations that were truly regrettable and avoidable – and largely caused by human error.

As anyone knows you don't need much of an incline for a vehicle to creep forward or roll backwards. And, of course, when it comes to mountainous terrain, the steeper the slope the faster the rollaway.

2. How great is this risk you are talking about?

Well, it's hard to find numbers in NZ but there are 2 international studies that have been done over the past 2 decades:

The first was a 10-year study by Worksafe Australia that found that, on average, nearly 5 people a year were killed by a moving truck while loading or unloading – and in the majority of these cases those fatalities were truck drivers and occupants.

The second was a study by workinjury.com on work related motor vehicle traffic fatalities in Australia, New Zealand, and the United States. It found that in all 3 countries, male workers, older workers, and truck drivers were at higher risk.

3. Can you explain what the Anti-Rollaway System does?

The MAX-SAFE Anti-Rollaway Brake System does two main things

- 1) It will stop a vehicle from moving or rolling if the door is open, the park brake is not properly applied, and the driver's seat is vacated.

So, if the driver leaves the cabin without fully applying the parking brake, the MAX-SAFE Anti-Rollaway Brake System activates immediately to prevent the vehicle from rolling away – creating a safe environment.

- 2) It warns of any potential danger to the driver – or any people in the vicinity of the vehicle – through an optional audible alarm and flashing lights.

The system is not designed to replace a traditional park brake – that is still the responsibility of the driver. However, the MAX-SAFE Anti-Rollaway Brake System provides insurance against driver oversight.

Other good news is that it is available for both pneumatic and mechanical park brake type vehicles,

4. So that's a lot of vehicle smarts coming together in one solution?

It sure is. It relies on a state-of-the-art microprocessor to continuously monitor multiple inputs to determine the possibility of the vehicle rolling away.

This includes sensors that monitor the door, park brake, seat and other vehicle data.

It actually has two stages of warning and activation.

- 1) If the door is open and the park brake not on and the driver still in their seat, the Max-Safe Anti-Rollaway Brake System will sound a warning
- 2) If the park brake is not on and the driver exits the vehicle, the Max-Safe Anti-Rollaway Brake System activates immediately. The system also sounds an external tone with a solid ongoing alarm, turning the LED active on and continuously sounding the internal buzzer.

The unit also has a CAN Bus interface built in, allowing the system to collect relevant information from the vehicles CAN or OBD diagnostic system to help with detecting an unsafe situation.

5. I understand it's a solution from an Australian company and you are the NZ distributor, right? How did that come about?

That's right. The solution is developed by an Australian company called SGESCO-MAX that I had the opportunity to work for, about 10 years ago, when I spent some time living and working in Brisbane.

It was developed in the early 2000s – an Australian first actually - and today is used by thousands of garbage trucks across Australia, and also by emergency service vehicles like the Queensland Rural Fire Brigade.

It's a solution that has universal appeal as its suitable for any type of heavy vehicle in any industry.

In New Zealand, the company is known by its product brand name MAX-SAFE Maximum Security.

They are an Australian leader when it comes to heavy vehicle safety.

They also offer solutions for blind spot monitoring of all sides and corners of a vehicle, as well as solutions for speed limiting, occupant safety and driver behaviour. These MAX-SAFE products can be added individually to new vehicles in the build stage or retrofitted, and they all come together in what's called the MAX-SAFE Safety Eco-System for greater vehicle safety.

That's the future for companies serious about heavy vehicle safety as the MAX-SAFE Safety Eco-System can be integrated with Fleet Management software like MiX Telematics.

The MAX-SAFE solutions make heavy vehicles - and drivers - significantly safer, through intelligent and active solutions that prevent accidents, protect property and develop better drivers.

And now – fleet managers can take advantage of the most extensive safety metrics and levers available – in one holistic safety eco-system.

6. Right, we'll dive into that another time, sticking with the Anti-Rollaway Solution, who's using it here in New Zealand?

- Connetics, the Utilities company, has started installing it on what they call their high-risk vehicles with the aim to have it installed on about 80-90 vehicles over the next few years.
- And the cement giants, Allied Concrete and Firth Concrete. Allied has been using it for about a year now and Firth concrete has just taken the solution on board for all new vehicles and a fleet roll out. The final details are yet to be confirmed but it's a huge commitment from some big players.

Interestingly, Connetics told us that when they work on a Fulton Hogan site, it's a requirement that all vehicles have a Park Brake Alarm and with the MAX-SAFE solution they tick that box.

7. What industries use this solution, is it suitable for?

This solution has been designed to make heavy vehicles safer – so that cuts across every industry – however, particularly those working in transport, public utilities, forestry, road and building construction, council vehicles that do tree lopping and the like, waste management companies, mining and agriculture. Those working at our ports. The list goes on.

1. What benefits will a customer experience?

There are numerous benefits for truck drivers and fleet managers.

First and foremost, it keeps people safe – that's drivers and other people around a working vehicle by overcoming human error when someone forgets to apply the park brake or doesn't apply the park brake properly.

So, it's an active, automatic system. From a driver's point of view there is no human intervention. The only human intervention is when they release it when they take off again.

There was a situation here in NZ, in Southland, back in 2015 when a grader driver stepped out of his cab to vomit – it happens - then he stepped on his vomit, slipped and was run over by his own vehicle. A tragedy that would have been avoided had the vehicle been fitted with the MAX-SAFE Anti-Rollaway Brake System.

But one of the best things about this solution, is it prevents runaway vehicles including ones on steep hills. There are many industries that would benefit from such a solution such as forestry.

The Solution just doesn't protect people it protects property – so reduces insurance claims.

And equally important, it protects the vehicle, so the vehicle continues to be a working vehicle.

So, it's a one-off price to give you significant safety and savings over the life of a vehicle.

For Fleet Managers it does give them peace of mind, knowing people are safer, particularly in remote locations, because you are reducing a major risk element.

The other side-benefit, is that with the inbuilt park brake alarm – it meets site safety requirements that many large companies are requiring for their sub-contractors.

2. How is the solution fitted?

The solution can be fitted as part of a new build or retro-fitted on any vehicle over 4.5 tonnes – from tippers to trucks to semi-trailers, to graders and even buses.

It's an out of the box customised solution with ready to go plugs for each vehicle type – so if you have a Hyno you get Hyno plugs, if you have an Isuzu you get Isuzu plugs and so on. There is no splicing of wires. This gives customers full confidence in the integrity of the system.

AutoKraft Electrical & Diesel can travel to depot locations in New Zealand to fit the solution. We are currently looking to train a select number of dealers in major locations across New Zealand as well.

3. What sort of training and support do you provide?

Once we have fitted the solution, we train drivers in how it works and how to reset it after the park brake has been activated.

Part of the training covers off the routine checks that vehicle operators should do on a daily basis and during regular vehicle servicing.

We can also provide companies with online training for operators. It takes around 10 mins to complete, which then certifies them in the correct operation of this MAX-SAFE solution.

The Max-Safe Anti Rollaway Brake System has inbuilt algorithms for constant self-analysis of any faults.

We provide maintenance under a 12-month warranty, and Preventative Maintenance is available via a 6 year extended warranty called Lifecycle Maintenance.

That replaces any main components at the end of lifecycle.

4. So how do people find out more information? Who do they talk to?

They find information on the MAX-SAFE website that's www.maxsafe.com.au
and from our website:
which is very easy: www.aed.nz
or give us a call on 06-359 0100