

# **BRAKESAFE WHEEL END BRAKES**

**Unlocking Cost-Effective Fleet  
Management for Toyota Land Cruisers**

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# OVERVIEW

Light vehicle brake costs for Toyota Land Cruiser extend beyond upfront expenses, covering system components and installation.

However, overlooked factors like quality, downtime, resale value, lifecycle considerations, and environmental impact are crucial in effective budgeting and risk mitigation for sustained reliability and safety in mining operations.

Explore the financial benefits of **ABT BrakeSAFE Wheel End Brakes** for cost-effective and reliable operations.

## BrakeSAFE Wheel End Brakes

Elevate safety and maintenance standards with ABT BrakeSAFE Wheel End brakes. Equipped with a **Spring Activated Hydraulic Release (SAHR)** failsafe component and optional interlocks, the integrated Park and Emergency Brake system engages automatically upon pressing the E-Stop button, turning off the engine key or opening a vehicle door.

This failsafe feature **eliminates the risk of unintended vehicle movement, ensuring an unprecedented level of safety for operators and site personnel.** The effectiveness of this technology is underscored by its mandated use in certain global mining jurisdictions.

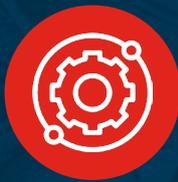


## Features and Benefits

ABT's BrakeSAFE braking system can be fitted to vehicles with either disc brakes or drum brakes. Our brakes feature a single brake rotor and distinctive grooved brake pads. The entire brake system is housed in an oil-filled, sealed casing, protecting it from foreign abrasives and corrosive materials. This complete seal ensures reliability, reduces vehicle maintenance, improves vehicle availability, making it a safer brake system in harsh operating conditions.



Unrivalled Safety



Improved Performance



Wheel-End Assembly



Extremely Low Wear Rate



Cost-Effective



Zero Emission



Improved Fleet Utilization



Reduced Maintenance



Custom Solutions Available



Brakes can be applied automatically or activated manually

## How It Works

The **ABT BrakeSAFE System** works by extending the brake calliper to enclose the disc, forming a split housing. The inner housing is mounted to the axle end, and after installing the pads, disc, and hub, the outer housing completes the assembly.

Our patented cooling fluid, a specially selected oil, is added to the housing, facilitating heat transfer from the brake disc to the housing. This allows the heat to be rejected to the surrounding air, effectively controlling the operating temperature of the braking system.

**BrakeSAFE technology** emerges as the versatile solution that covers both service and park brakes, adapting seamlessly to diverse operational conditions.



# Total Cost of Ownership (TCO) Brake Calculator for Toyota Land Cruisers

ABT's TCO calculator offers a transparent, comprehensive analysis of total lifecycle cost. It factors in initial purchase and installation, along with maintenance, repairs, downtime, and replacements specific to the Toyota Landcruiser. Mining vehicle brakes, crucial for your fleet, have a significant impact on overall operational costs.

In an example TCO analysis comparing ABT BrakeSAFE to Toyota Standard OEM brakes in an Australian underground mining operation, **ABT's BrakeSAFE Wheel End Brakes demonstrate an impressive 22-39% reduction in maintenance costs between three and five years of the vehicles operational life span.**

This notable savings stands out compared to standard brakes, which experience escalating maintenance costs over the same period. Standard OEM Brakes involve multiple service items like replacing service brake pads, rotors, callipers, and more. With ABT, there are only three service items: Minor Service, Major Service Kit and SIBS Fluid Replacement. ABT Wheel End Brakes require less service parts maintenance, **resulting in more than 70% decrease in annual service parts cost.**



ABT's commitment to sustainable business practices is evident in BrakeSAFE Wheel End Brakes, which are completely sealed to prevent brake dust emissions.

Explore comprehensive insights provided by ABT's TCO Brake Calculator for a more efficient and cost-effective fleet management strategy.