



Reliable, low-maintenance
and safe wet brake systems



SIBS® IV Driveline Brakes

A fully independent brake of “last resort” to arrest a vehicle

Vehicle Range:

SIBS® IV Driveline Brakes can be fitted to a range of truck and axle manufacturer models:

- Mitsubishi Fuso – Canter FG84 and FGB71
- Hino GT1J / Ranger Pro / 500
- Hino FM1J
- Fuso FV51
- Mack Metroliner
- Kenworth T359
- Isuzu FSS 550
- Isuzu FTS 800
- Isuzu FVZ 1400
- Isuzu NPS300

They can also be easily adapted to a range of other truck and axle manufacturer's models.

SIBS® IV Brakes:

SIBS® IV brakes consist of a single brake rotor and unique grooved brake pads, all immersed in a sealed oil-filled housing. SIBS® IV brakes experience minimal wear due to their low operating temperatures and the exclusion of foreign abrasive and corrosive materials. This means more reliable brakes, less vehicle maintenance, improved vehicle availability and an overall safer brake system.

SIBS® IV Driveline Brakes are a supplementary brake system used to arrest the vehicle in the event of brake failure in the standard brake system – for example on a vehicle that is experiencing brake fade on a long decline.

SIBS® IV Driveline Brakes are a “spring applied hydraulic release” brake system. The brake acts as both an Emergency Brake and as a supplementary Park Brake. The brake is automatically and fully applied when:

- When the E-Stop button is pressed,
- The engine key is turned off, or
- A vehicle door is opened

The brake can arrest the vehicle in the event of a problem with the truck's standard brake system. As a park brake it also ensures the vehicle cannot roll away unexpectedly – a feature that provides an unprecedented level of safety for vehicle operators and site personnel.

Key Components of the SIBS® IV Brake:

The SIBS® IV Driveline Brake consists of the following key components:

Driveline Brake Assembly:

- A fully enclosed wet brake assembly that is fitted adjacent to the rear axle pinion
- A “spring applied hydraulic release” system. Hydraulic pressure is applied to release the brake. When in a rest state (no hydraulic pressure) the brake is fully applied by the disc springs in the housing

EMMA Pump Module:

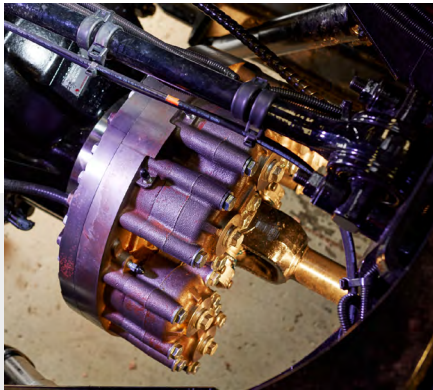
- An electrically operated hydraulic pump module is used to pressurise the Driveline Brake Assembly and release the brake. The hydraulic pressure is used to release the driveline brake.

SIBS® IV Control Box:

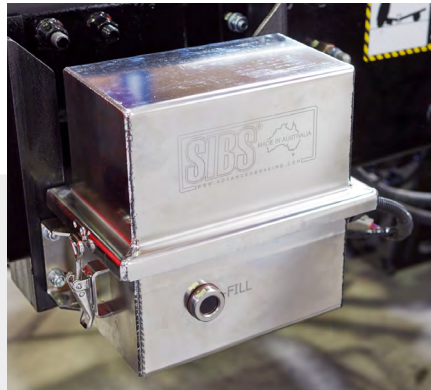
- A dash mounted control box used to control the application of the driveline brake. The control box applies the park brake if either the E-Stop button is depressed or if one of the safety interlocks is activated (door opened, key turned off).

Operating the SIBS® IV Driveline Brake:

- The SIBS® IV Driveline Brake is controlled by an E-Stop button installed on the vehicles dash. To apply the brake, the E-Stop button is simply depressed. To release the brake, the E-Stop button is reset
- The vehicle standard service brake and park brake system are retained and are fully operational



Driveline Brake



EMMA Pump Module



SIBS® IV Control Box

Product Features

Reliable park brake system:

- The brake calliper, rotor and brake pads are fully enclosed and protected in an oil-filled housing. This completely protects the brake from contamination and reduced brake component temperatures virtually eliminate brake component wear
 - This results in a very reliable emergency and park brake system as there is virtually no wear or deterioration of the critical brake system components
- The “spring applied hydraulic release” park brake ensures that the park brake is fully applied every time
 - Coupled with the low wear of the brake components this means that the vehicle can be reliably restrained every time. There is no longer any need for vehicle chocking.

Low maintenance requirements:

- Minimal maintenance is required as all the key brake system components are now enclosed and protected in an oil-filled housing.

Improved safety:

- The enclosed SIBS® IV Driveline Brake system prevents exposure to contaminants or corrosion that might lead to deterioration of the brake performance. The low wear rate of the brake also ensures that the SIBS® IV Driveline Brake performs properly every time it is applied
- The park brake is electronically interlocked to ensure the park brake is applied every time the engine is turned off or a door is opened, eliminating the risk of the park brake not being applied when the driver gets out of the vehicle
- The SIBS® IV Driveline Brake is a “spring applied hydraulic release” brake – this ensures that the brake is “fail safe”

Brake Installation

Installation Process:

- SIBS® IV Driveline Brakes are a modular design and fairly easy to install onto the truck
- Depending on the axle model, the pinion cover is machined to provide a smooth mounting surface for the Driveline Brake Assembly
- The Driveline Brake Assembly is then attached, the EMMA Pump Module is installed and the SIBS® IV Control Box is wired

Installation Manuals:

- ABT supplies a comprehensive manual for each SIBS® IV brake. This manual describes the brake installation process and the maintenance procedures.

Training and Certification:

- ABT provides training for customer's fitters in SIBS® IV brake installation and maintenance procedures. Fitters who complete this training are issued with “Certificates of Competency” to ensure that the brakes are installed and maintained according to the SIBS® Manual.

Brake Maintenance

- SIBS® IV brakes are fully enclosed in an oil-filled housing. The very low brake wear rate means that the only regular service requirement is SIBS® oil replacement. This is typically aligned with the engine oil change interval.

SIBS® IV brakes	
Minor service	Replace SIBS® oil every 250 hours
Major service	System overhaul and general inspection every 4,000 hours