

OPTILEVEL™ SUSPENSION

THE SMART SOLUTION FOR TRAILER HEIGHT CONTROL



WABCO

OPTILEVEL - TRAILER AIR SUSPENSION AT ITS BEST

TRAILER LEVELLING WITHOUT THE STRAIN

WABCO OptiLevel™ brings together six valuable trailer suspension functions in a single, economical package.

Enabled by eTASC, WABCO's new suspension control device, OptiLevel will cut fuel costs, decrease loading/unloading times, reduce the risk of accidents and allow docked trailers to change height level without an attached tractor. OptiLevel supersedes the repetitive manual adjustments that hinder loading and unloading: trailers automatically maintain the required height at the loading dock and return to their driving level when back on the road.

The Six Functions of OptiLevel



Lift & Lower

The lift and lower function can be operated manually via the eTASC handle or the electronic control devices. When using the eTASC handle to lift and lower, electrical power is not required, freeing the truck cab to unhook and leave.



Fuel Saving Suspension

Out on the road, OptiLevel measures trailer ride height using a highly accurate sensor. This intelligent control avoids the constant inflation and deflation of air bellows common with levelling valves in conventional air suspension control, providing verifiable fuel savings.



Return-to-Load Level

When set at a programmed height, OptiLevel will maintain the trailer at that height. When powered, OptiLevel will instantly compensate for the change of load and continuous movements of forklifts while loading or unloading.



Memory Level

OptiLevel provides storage for six programmable height settings – perfect for trailers that return to the same docks on a regular basis. The memory function can be activated from the cab, via a WABCO SmartBoard fitted to the trailer, or can be activated automatically based on vehicle speed.



Return-to-Ride Level

When pulling away from the dock, Return-to-Ride will also automatically adjust the trailer to a safe, pre-configured driving height as soon as the trailer exceeds a pre-defined speed.



2-Point Control

Available for drawbar trailers and glass inloaders, this function keeps the trailer platform horizontal when cargo is unequally loaded. It enables optimal control of two different trailer sides: front & rear or left & right.

THE BENEFITS OF WABCO OPTILEVEL

- Optilevel height sensors offer more economical control of trailer height than by using conventional air suspension methods.
- In tests, OptiLevels Fuel-Saving Suspension function reduces fuel consumption by approximately 100 liters per trailer per year and lowers CO₂ emissions by up to 275kg, when compared with conventional systems.
- OptiLevel ensures a faster, smoother loading and unloading procedure. Once docked, sensors and intelligent eTASC control will keep a trailer at the required height regardless of loading and unloading operations, eliminating the need for tricky adjustments.
- If no electrical power source is available, the trailer can be lifted and lowered manually with the eTASC handle. Tractors can be better utilized to maximize fleet resources.
- Trailers equipped with eTASC can be lifted and lowered up to four times faster than using conventional lift-and-lower valves.
- OptiLevel incorporates a memory function that will store the docking height for a variety of locations, allowing drivers to save time on approach.
- When back on the road, Return-to-Ride Level will automatically restore a trailer to a safe and economical ride-height.

WABCO offers a broad range of trailer air suspension solutions. The electronic trailer air suspension control device eTASC offers all OptiLevel functions.

OptiLevel FUNCTION		OptiLevel DEVICE	Rotary Slide Valve	TASC™	eTASC (Trailer EBS E Premium)	ECAS 1-Point (Trailer EBS E Premium)	ECAS 2-Point (Trailer EBS E Premium)
Manual Activation (via available control modes)	Lift and Lower without Power Supply from Truck						
	Lift and Lower with Power Supply from Truck						
	Memory Level (power required)						
	2-Point Control (power required)						
Automatic Activation (power required)	Return-to-Ride Level			✓	✓	✓	✓
	Return-to-Load Level				✓	✓	✓
	Fuel-Saving Suspension				✓	✓	✓

✱ ECAS 2-point Control with eTASC works with EBS E version 4 onwards only.

Trailer EBS E: Trailer Electronic Braking System Generation E
ECAS: Electronically Controlled Air Suspension



Activation via handle



Activation via electronic control device



Automatic activation

OPTILEVEL CONTROL DEVICES



CAB-MOUNTED TRAILER REMOTE CONTROL

OptiLevel functions can be operated via a Trailer Remote Control from within the truck cab. This reduces the amount of time spent in the dock.



TRAILER REMOTE CONTROL UNIT

OptiLevel functions can be accessed via a remote control unit mounted at the rear of the trailer.



SMARTBOARD

A convenient option for OptiLevel control is the use of an existing trailer-mounted WABCO SmartBoard. Designed to control and monitor a wide range of trailer functionality, the SmartBoard can access all OptiLevel functions.



CONTROL BOX

Also installed at the rear of the trailer, a control box can be mounted at a height suitable for operation by (un)loading personnel. This enables basic suspension functions.



eTASC HANDLE

OptiLevel can be manually operated via the eTASC handle. More advanced than other manual systems, eTASC doesn't require the trailer be attached to an electrical power source, such as the tractor unit or battery, to enable lifting and lowering of the trailer.



QUALITY ASSURED

Every WABCO part is made of high-grade materials and is rigorously tested by WABCO before leaving our hands. Each is a product of WABCO's 150 year history of innovation and design excellence. There there is also an added assurance that the quality of every WABCO part is reinforced by a powerful global customer service network.

ABOUT WABCO

WABCO (NYSE: WBC) is a leading global supplier of technologies and control systems for the safety and efficiency of commercial vehicles. Founded nearly 150 years ago, WABCO continues to pioneer breakthrough electronic, mechanical and mechatronic technologies for braking, stability and transmission automation systems supplied to the world's leading commercial truck, bus and trailer manufacturers. With sales of \$2.5 billion in 2012, WABCO is headquartered in Brussels, Belgium.

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