



Mini manual*: **Wabco Smartboard control and ECAS functions**



1. Introduction

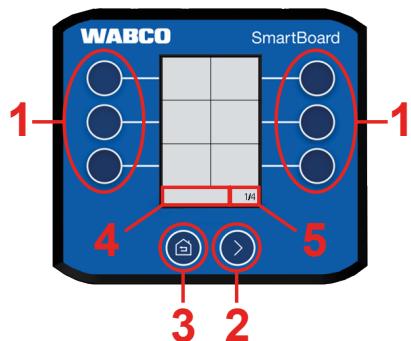
In this document, we explain how to operate the **Wabco Smartboard II** of your STAS Trailer, and exactly how to use the **ECAS functions** (Electronically Controlled Air Suspension) using the Smartboard.

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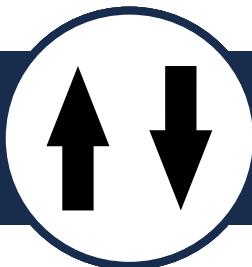
*The content of this document is of a purely informative nature and no liability of STAS Konstruktie- werkhuizen nv can be derived from this document. The only legally valid document is the official STAS user manual supplied with your STAS trailer.

2. The buttons and their function



1. Function buttons
2. Next page menu
3. Previous page menu (or back to start page when you press and hold)
4. Diagnostic messages and active systems
5. Current menu page

3. ECAS: control air suspension height



ECAS: Lowering and raising the air suspension

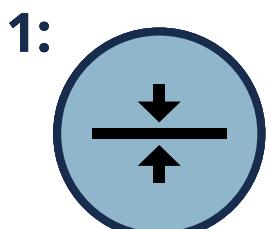
Purpose of this function: To raise and lower the chassis by using the Smartboard.

! *Raising and lowering the chassis can also be done using the blue or black lever on the control console. The lever works even when the ignition is switched off.*

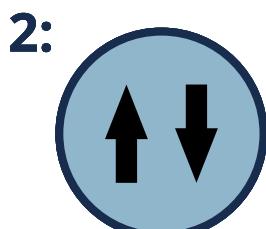
! *The trailer always returns automatically to the ride height configured by STAS from a speed of 15 km/h.*

From the homepage, press the following buttons to enter the appropriate menu:

SMARTBOARD > ECAS > Lifting/lowering chassis



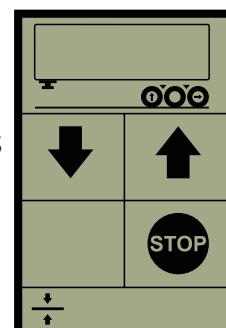
ECAS



Lifting/Lowering chassis

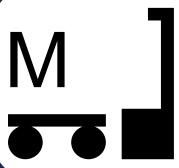
3:

Lowering chassis



Lifting chassis

ECAS stop



ECAS: Setting memory level

Purpose of this function: To store a (frequently used) height in order to be able to go to that specific height very easily at a later date, e.g. in case of frequently used unloading points.

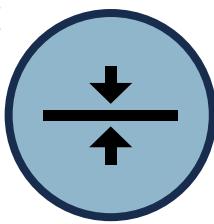
The system can store up to 2 levels and both storing and selecting a memory level are done in the same menu.

 *The trailer always returns automatically to the ride height configured by STAS from a speed of 15 km/h.*

From the homepage, press the following buttons to enter the the appropriate menu:

SMARTBOARD > ECAS > Memory level

1:



ECAS

2:



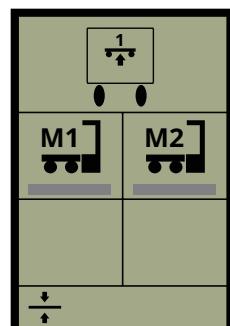
memory level

(3:)

When setting a new memory level, use the blue or black lever to move to the preferred height.

4:

Select / save memory level 1
(press and hold button)



Select / save memory level 2
(press and hold button)

4. Lifting axles: lifting axle functions and their operation

What do we mean by "lifting axles"?

Simple: lifting axles are axles that can lift themselves off the ground by means of lifting bellows. **However, an axle can have lifting axle functions without having lifting bellows.** Without these lifting axle bellows, only the pressure in the air suspension is reduced, which means that the axle no longer carries a load, but still rests on the ground under its own weight. **We therefore distinguish between "lifting axles" and "lifting axle functions".**



- ✓ **Lifting axles:** axles equipped with lifting bellows, and thus capable of detaching from the ground.
- ✓ **Lifting axle functions:** all (automatic) functions related to manipulating the pressure in the air suspension bellows, even without the axle being visibly detached from the ground.



Lifting axle control: manual operation of the lifting axle(s)

Purpose of this function: to manually lift and lower any lifting axles on the trailer by using the Smartboard.



This function only works on vehicles equipped with lifting bellows. When these are not fitted, this function does nothing.

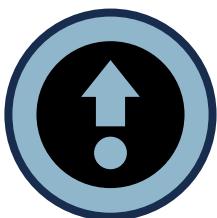


The lift axles always return automatically to the configuration configured by STAS from a speed of 15 km/h.

From the homepage, press the following buttons to enter the the appropriate menu:

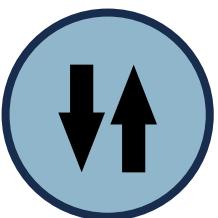
SMARTBOARD > Lifting axle control > Controlling the lifting axle

1:



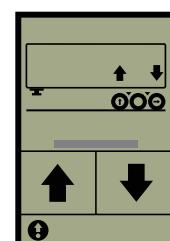
Lifting axle control

2:



Operating lifting axle(s)

3:



Status of lift axle(s)

Lift axle up
(press twice for the
second lift axle)

Lift axle down
(press twice for the
second lift axle)



Lift axle function: OptiTurn

Purpose of this function: To optimise the turning circle of the combination when cornering. The theoretical wheelbase is shortened in corners by lifting or (partially) relieving the load on the rear axle. Cornering is detected thanks to the ABS sensors.



! This function also works smoothly on vehicles not equipped with lifting axle bellows. In this case, the rear axle is not lifted, but rather relieved.

! When all axles are 100% loaded, the rear axle will not detach from the ground even in the case of lifting axle bellows. The rear air suspension bellows are vented until the front two axles are loaded to a maximum of 130%. When fully loaded, the rear axle thus continues to carry 40% of its maximum load when cornering.

From the homepage, press the following buttons to enter the appropriate menu:

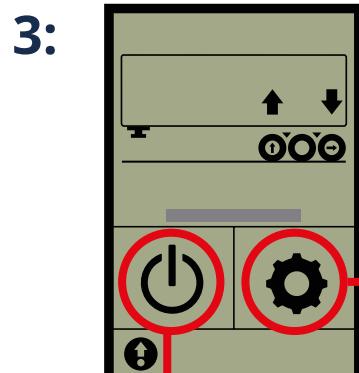
SMARTBOARD > Lifting axle control > OptiTurn



Lifting axle control

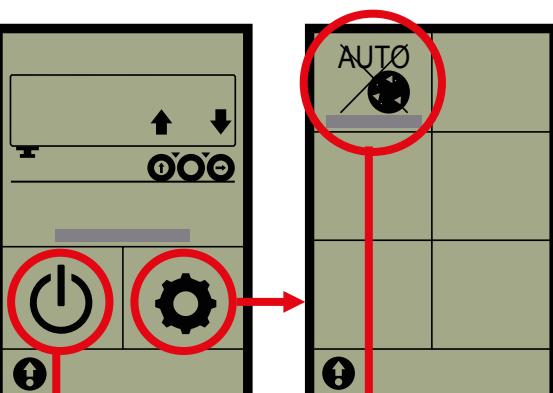


OptiTurn



Manual activation/deactivation:

When activated at standstill, the last axle is relieved as when cornering.
Handbrake must be off and ignition on.



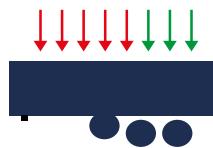
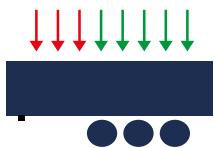
Auto function:

By disabling the auto function, you can ensure that the system remains switched on or off while driving.



Lifting axle function: Traction help

Purpose of this function: to create more traction on the truck's towing axle by lifting or (partially) relieving the load on the first axle of the trailer.



✓ Load on the truck

✓ Load on the trailer

There are three ways to activate this feature:

- ✓ By disengaging the handbrake, touching nothing for 2 seconds, and then pressing the brake pedal hard three times within 10 seconds.
- ✓ Automatic on first departure after switching on the engine (See "Auto function" below).
- ✓ Manually using the Smartboard (see below).



This function also works smoothly on vehicles not equipped with lifting bellows. In this case, the front axle is not lifted, but rather relieved.



When fully loaded, the front axle is not fully relieved of its load, which also means it is not lifted off the ground, even when lifting bellows are installed.

From the homepage, press the following buttons to enter the appropriate menu:

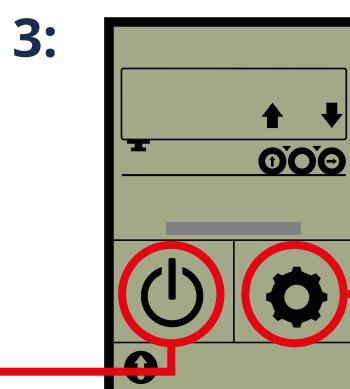
SMARTBOARD > Lifting axle control > Traction help



Lifting axle control

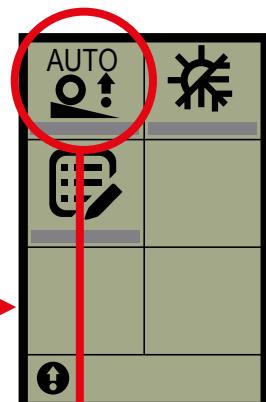


Traction help



Manual activation:

The first axle is relieved just like when the brake pedal is pressed three times. Handbrake must be off and ignition on.

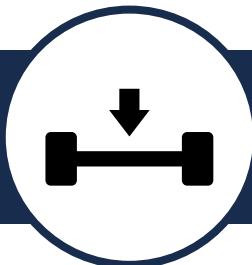


Auto function:

If enabled, the semi-trailer will activate traction help on the first departure after starting the engine.

5. Reading the information

Besides controlling the functions of your trailer, the Smartboard can also display information about the trailer.

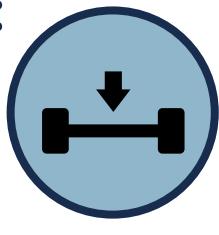


Axle load

From the homepage, press the following buttons to enter the the appropriate menu:

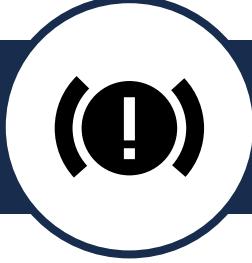
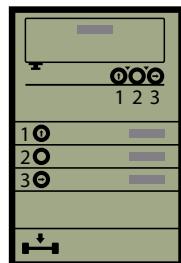
SMARTBOARD > Axle load

1:



Axle

2:



Brake lining wear

From the homepage, press the following buttons to enter the the appropriate menu:

SMARTBOARD > brake lining wear

1:



Brake lining wear

2:



Brake lining wear OK

Wear threshold for brake lining reached. Contact your STAS dealer as soon as possible.



Saved error messages

From the homepage, press the following buttons to enter the appropriate menu:

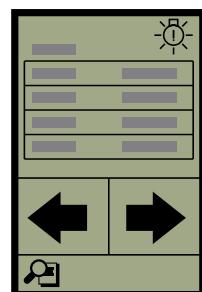
SMARTBOARD > Diagnostic memory

1:



Diagnostic memory

2:



Previous
message

Next
message