

Market introduction of the new Trailer EBS E

The WABCO Trailer EBS can already look back on a long story of success. Compact design, ease of installation, and comprehensive improvements of braking system functions when compared with conventional braking systems are all factors that contributed to TEBS quickly becoming established in the market.

Functionality was enhanced even further with generation D (TEBS D). Apart from the lifting axle control, it was the RSS (Roll Stability Support) function in particular that attracted attention. This stability control system effectively reduces the trailer's tendency to overturn in hazard situations and therefore contributes to vehicle safety on the roads.



New functions that impress

The new TEBS E makes another great leap forward in terms of innovation. The extended functionality now includes complete control of the air suspension in a central axle trailer or semitrailer with lifting axle control. It can be operated using an ECAS remote control unit, an ECAS control box, or the new SmartBoard.

Analogous to VCS II, TEBS E is now also equipped with what is referred to as Generic I/O ports. These freely programmable inputs and outputs make it possible for the vehicle manufacturer to control functions of other systems in the vehicle via TEBS E (relative to speed for example).

A lot of thought went into making TEBS E simple to install: Cable connections were equipped with an improved plug-in design and pipes are now simply inserted into preassembled couplings. Workshop staff will be especially glad to hear that these plug-in couplings can be released and reused.

Overload protection valve with connections for the spring brake cylinders, as well as charging valve and pressure distribution to air reservoirs are implemented directly on the TEBS E thanks to the flange-mounted PEM (Pneumatic Extension Module).

What does the workshop need?

A new version of the Diagnostic Software is required due to the enhanced functionality. This software will be available as part of the Diagnostic Subscription in the near future. The program provides comprehensive information on handling TEBS E in the form of a help file. We will also introduce a Diagnosis copy-protection together with this software; we will inform you on this topic separately.

This diagnostic program can be used not only for the usual diagnostic functions but for programming the TEBS E functions as well. Training and a corresponding licence letter are required to activate this programming function however.

We will offer training for TEBS E in good time prior to market introduction. This training is conceived exclusively for TEBS E and explains the known functions as well as the special functions described above. This training is suitable for anyone who needs to acquire comprehensive knowledge of the new system.

Additionally, we will provide E-Learning via the Internet. By means of this web-based training you will also become familiar with all system components and functions – in other words, everything you need to know when working with the system. After completing this training course, you will be in a position to replace a modulator. Being in possession of PIN 2 permits copying the default parameter sets of the vehicle






manufacturer from a protected file to a new device and to put this device into operation. This means that you do not need to acquire all the knowledge required for reprogramming the system.

Diagnostic connection

Trailer EBS E can be diagnosed using the same CAN configuration as for TEBS D. For this purpose, the ISO connection adapter is plugged in between towing vehicle and trailer vehicle. Depending on the interface installed, the diagnostic cable 446 300 361 0 or the CAN Converter 446 300 470 0 is used in addition.

Connection via the CAN diagnostic cable 446 300 348 0, which is also used for IVTM systems, is simpler. A special yellow diagnostic socket must be provided by the vehicle manufacturer for this cable however. The yellow cap the diagnostic connection indicates the difference to the conventional socket with K-line diagnosis, which is not compatible with the pin system.

With the Diagnostic accessory case "Trailer" 446 301 023 0 your are perfectly equipped for TEBS E.

Diagnosis TEBS E			
Option 1	Diagnostic interface with USB interface 446 301 022 0 	Diagnostic cable 446 300 361 0 	Connection adapter ISO 7638 with CAN socket 446 300 360 0 
Option 2	Diagnostic interface with serial interface 446 301 021 0 	CAN Converter 446 300 470 0 	Connection adapter ISO 7638 with CAN socket 446 300 360 0 
Option 3	Diagnostic interface USB or serial 	Diagnostic cable 446 300 348 0 	Diagnostic connection with yellow cap 

Further information

TEBS E will certainly be installed in many trailer vehicles in the near future. This means that soon we will also have vehicles using this system on our roads. We hope we could also spark your interest regarding this new system. We are currently preparing a TEBS E system description providing detailed information. Ask your WABCO partner about the new TEBS E!