

# Alltrucks diagnostics package An exclusive for premium commercial vehicle workshops



## **Alltrucks diagnostics package**

## Competitive advantages that pay off

Alltrucks diagnostics package are designed and developed specifically for Alltrucks workshops.

#### The exclusive Alltrucks diagnostics package at a glance

Alltrucks GmbH & Co is the joint venture of the three leading suppliers of the automotive and commercial vehicle sector, Bosch, Knorr-Bremse and ZF. This combination of expert diagnostic knowledge has been used to create a market leading diagnostic package. Bosch is contributing its know-how in the area of multibrand diagnostics and workshop equipment, while Knorr-Bremse and ZF are adding their know-how for diagnosis and maintenance of their systems on the basis of OEM quality.

In essence terms this means one diagnostic system instead of three separate ones for Alltrucks workshops. As the diagnostics interface, the diagnostic system, comprising hardware and software, uses KTS Truck, which is already commonly encountered in the market. The combined diagnostics software consists of:

- ► ESI[tronic] Truck from Bosch
- ▶ NEO|orange from Knorr-Bremse
- ► ZF-TESTMAN from ZF

The user switches between the diagnostic software at the "Alltrucks StartCenter".

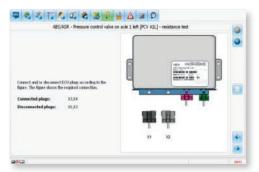
The benefits for the Alltrucks workshop are obvious:

- ► Instead of three individual diagnostic interfaces, only one is used: KTS Truck
- ► The workshop has integrated diagnostics software at its fingertips

As part of the full-service offer from Alltrrucks, hotline and training is offered. The hotline and technical training are supported by employees from the three founding companies.



ESI[tronic] 2.0



NEO|orange



ZF-TESTMAN

Three leading companies, three strong diagnostic products

ESI[tronic] 2.0





### **KTS Truck**

## The ideal solution for commercial vehicles

KTS Truck is the ideal diagnostics solution for commercial vehicle workshops.

#### Optimized and mobile diagnostic solution

- ▶ KTS Truck module for trucks, vans, trailers and buses
- ▶ Can be connected to DCU 220, PC or laptop
- ▶ KTS Truck can be connected to all commonly used laptops/PCs through the USB interface
- ▶ Integrated Bluetooth connectivity with a long range of up to 100 m
- ▶ Bluetooth USB adapter included in delivery
- ▶ Robust housing

#### **Expanded testing and diagnostic capabilities**

In addition to KTS Truck, the FSA 500 vehicle system analysis and MMD 302 digital multimeter are available to provide further capabilities for testing and diagnosing the electrical and electronic systems of commercial vehicles.

The handheld FSA 500 Is a battery-operated measuring module that connects wirelessly to the PC system. Designed for fast, mobile use in the workshop. Preselected component tests and a signal generator for simulation of sensor signals as well as practical equipment details make it a reliable investment in the future.

The MMD 302 is ideal for all measurements commonly made on electrical and electronic systems, especially in conjunction with the voltage and resistance measurements performed with NEO|orange.



Mobile diagnostic solution: KTS Truck

Item number 0 684 400 516

## **KTS Truck** Modular solution



Expansion kit pressure measuring unit Item number 1 687 010 396

Item number 0 684 010 512

Item number 0 684 500 302



Continuously in use – How the fleet pays for itself. Powerful vehicles need strong partners like you: The workshop that professionally maintains and repairs trucks and vans. With full service from Bosch, you give your business with commercial clients additional momentum through service as well as replacement parts and accessories from Bosch. All with Bosch OEM quality.

## **Efficient fault analysis and localization** save time and provide security

When used in conjunction with the PSS 300 pressure measuring unit and measuring box, NEO orange provides expanded diagnostic capabilities for pneumatic brake systems in the workshop.



Pressure measuring unit for NEO | orange Item number 0 681 443 027

Measuring box Item number 1 684 463 881

#### Pressure measuring unit

Up to eight pressure sensors can be connected to the PSS 300 pneumatic pressure measuring system. Prior to each use, the measuring system is calibrated together with the sensors. Acquisition and evaluation of the measured data takes place automatically during diagnosis - this saves time and makes reading errors a thing of the past. The measured pressure data are recorded and can be saved individually.

The system can be used as a part of guided diagnosis and as a standalone pressure measuring system.

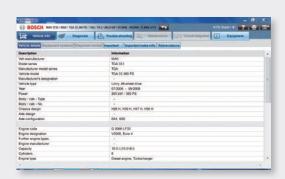
#### **Electrical measurement**

The measuring box is used for electrical measurements and can be connected to system components by means of adapter cables.

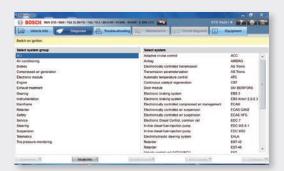
Measuring points and measuring pins are specified by the diagnostics and displayed graphically; the timeconsuming search for wiring diagrams is eliminated. Measurements are conducted under operating conditions in the integrated system, yielding in this way realistic measurement results.

With the aid of a multimeter, the user manually measures and enters electrical data, which are then evaluated automatically and recorded by the diagnostics.

## ESI[tronic] Truck: All information and functions for commercial vehicles



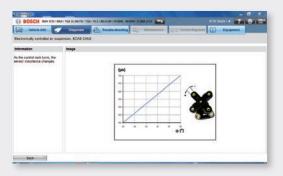
Vehicle information



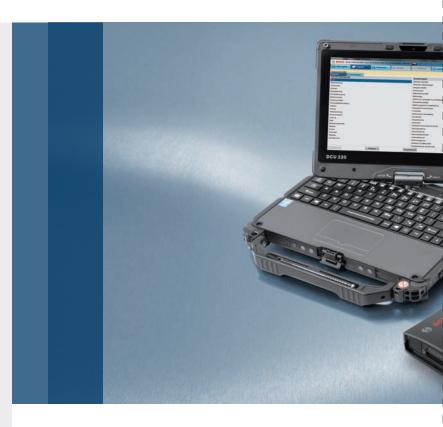
Control unit diagnosis



Technical data



Component information



#### **Everything in one place**

In addition to diagnosing control units, the ESI[tronic] software contains technical information such as circuit diagrams, service and repair instructions as well as system information. In addition to the Bosch spare parts catalogs and ZF Services catalog data of, information and installation instructions for products from Sachs, Lemforder, Boge and ZF Parts are available. ESI[tronic] Truck provides all information needed to perform reliable diagnosis, complete maintenance and efficient repair. The software package offers a high level of coverage for the trucks, vans, trailers and buses commonly encountered in the European market.

#### **Vehicle information**

Additional basic information on commercial vehicles contained in the software, e.g. model series, output, engine designation and axle configuration, forms the basis for a thorough diagnosis in the commercial vehicle workshop.

## ESI[tronic] 2.0



#### **Diagnostics**

Important functions for the commercial vehicle workshop are also included: reading and deleting error codes, selecting actual values, operating actuators, resetting service intervals and adapting components.

#### **Specification**

Assistance during troubleshooting: component information with specified values, output voltage, characteristic curves, etc.

#### **Circuit diagrams**

Fast and easy use through intuitive operation with dynamic component description.

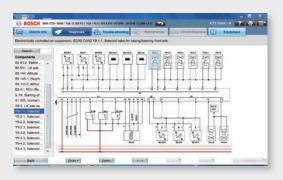
#### **Maintenance**

Semi-annual and annual inspections with additional check points can be accessed at any time.

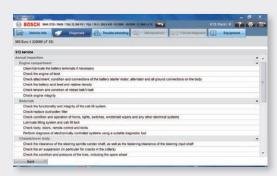
#### **Spare parts catalog**

Always at your fingertips - The complete spare parts catalogs from Bosch and ZF Services:

- ► Suspension
- ► Shock absorbers
- ▶ Steering
- ► Clutch



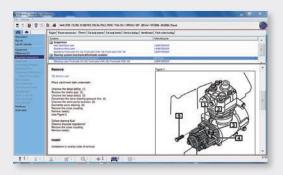
Circuit diagrams



Maintenance



Spare parts catalog



Installation instructions

## **NEO orange**: Expert diagnostics for brake systems from Knorr-Bremse



Extensive diagnostics and additional functions



System selection



Configuration



Fault code



#### Diagnostics and more - User-guided diagnostics and system analysis with NEO orange

The increasing complexity of the systems in commercial vehicles requires specific expert knowledge. NEO | orange helps the workshop find the causes of faults through system analysis, during which the interaction of electronic, mechatronic and strictly pneumatic components are taken into account.

#### **Extensive diagnostics and additional functions**

Within the Alltrucks diagnostics software, NEO | orange provides valuable know-how for the electronically controlled systems from Knorr-Bremse, e.g. EBS Truck/Trailer, ABS Truck/Trailer or electronic air treatment. In addition to extensive diagnostic functions, pressure measurements, service instructions, system and component information as well as troubleshooting instructions for conventional systems are available.

#### System selection and configuration

NEO orange provides guided diagnosis and assistance in the unambiguous and largely automatic identification of almost all electronic systems from Knorr-Bremse and their configuration regardless of the vehicle manufacturer.

#### **Fault code**

NEO orange displays the fault codes in "plain text" and as active and/or inactive. The extent of assistance during fault localization is selected by the user.





#### **Diagnostic instructions**

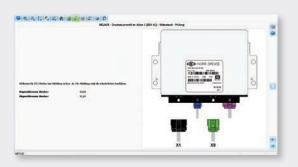
Guided diagnostics makes NEO orange easy to use. The user is guided through the diagnostics and measurements with clear instructions and graphical support.

#### Fault localization, measuring instructions, pressure measurement display

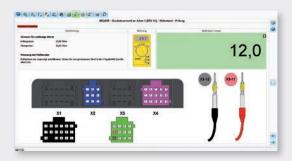
The procedures for troubleshooting have been prepared on the basis of technical and economic considerations with quality assurance in mind. Detailed instructions for any necessary measurements simplify fault localization. Measurement results are evaluated automatically. Extensive additional information and instructions for maintenance and repair help to rectify the fault.

#### **Diagnostic reports**

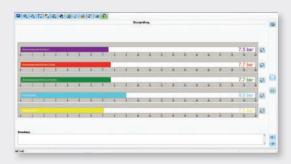
The entire diagnostic process is recorded automatically with detailed documentation of the data diagnosed and measured. Depending on the system, measurement results are displayed in the report with measuring point, measurement result and the associated specified value. The test reports can be saved, deleted and printed.



Diagnosis, instructions



Fault localization, measuring instructions



Fault localization, pressure measurement display



Diagnostic report, management

## **ZF-TESTMAN**: Expert diagnostics for suspension and driveline from ZF



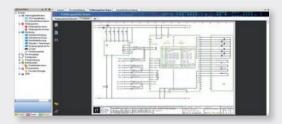
Product identification



Fault memory



Troubleshooting instructions



Circuit diagram





#### Rectifying faults with ZF know-how

ZF-TESTMAN draws on the collected suspension and driveline knowledge of ZF for troubleshooting and rectifying faults. Whether determining the spare parts needed or detailed troubleshooting - ZF-TESTMAN can help.

#### **Product identification**

Retrieval of all necessary product data so that a ZF service center can deliver the appropriate spare part or replacement product.

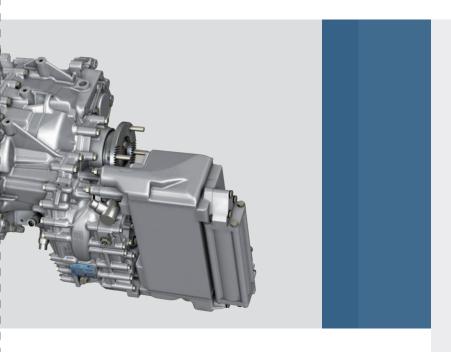
#### **Fault memory & troubleshooting instructions**

Readout of the product fault memory provides complete and unfiltered information about the fault. In addition, the appropriate circuit diagrams and search instructions are linked to each fault so that the correct repairs can be made quickly and efficiently.

#### **Operating data**

The products save not only fault codes, but also information about behavior during use or important performance data at the time the fault occurred. All of this information provides valuable advice for troubleshooting or optimizing the system.





#### **Function lockout**

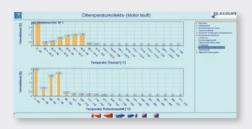
If a product does not work as expected, the reason may be inadequate conditions. Which conditions have not been met can be queried under function lockouts. This helps to determine whether an application error is involved or a defective component.

#### **Special functions**

For some products, there are diagnostic functions that assist with analysis of complex systems. For instance, driving switches can be checked for proper operation or loose contacts in the wiring harness found more easily.

#### **Troubleshooting mechanical products**

Most products in the vehicle have no electronics and are still complex enough. The troubleshooting instructions for mechanical products explain the diagnostic steps needed to find the fault. The steps performed are presented in a report.



Operating data of the product



Display of function lockouts



Special functions for troubleshooting



Troubleshooting mechanical products

## "Easy Connect" adapter concept

## for KTS Truck



1 684 463 770



lveco 3-pin 1 684 463 771



MB 14-pin 1 684 463 772



Renault VI 1 684 463 773



1 684 463 774



MAN TG (round plug) 1 684 463 775



DAF & Scania 1 684 463 776



MAN Series 2000 1 684 463 777



ABS module 1 1 684 463 778



ABS module 2 1 684 463 779



Wabco/Knorr ABS/EBS 1 684 463 780



1 684 463 781



1 684 463 782



ABS Volvo Bus 1 684 463 783



ECS Volvo Bus 1 684 463 784



1 684 463 785



Iveco Daily 1 684 463 786



VW LT/T4 1 684 463 787



Citroën/Peugeot Boxer 1 684 463 788



Scania 1 684 463 793



US protocol, 6-pin 1 684 463 789



US protocol, 9-pin 1 684 463 790



Cable set for trailers 1 687 001 945



Cable set for buses 1 687 001 946



Cable set for vans 1 687 001 947

#### The "Easy Connect" adapter concept makes connecting KTS Truck to the vehicle extremely simple:

- ▶ Simply attach the vehicle-specific adapter. Ready to diagnose control units.
- ▶ 20 adapters for trucks and vans
- ▶ 2 adapters for US vehicles
- ▶ 4 cable sets for trailers, buses, trucks and vans

## **Adapter cables**

## Data and facts

Special accessories	Item number	KTS Truck
Adapter cable		
Volvo adapter cable	1 684 463 770	•
Iveco adapter cable (models with year of manufacture before 1993), 3-pin	1 684 463 771	•
MB adapter cable, 14-pin	1 684 463 772	•
Renault VI adapter cable	1 684 463 773	•
Iveco adapter cable (models with year of manufacture after 1996)	1 684 463 774	•
MAN TG adapter cable (round plug)	1 684 463 775	•
DAF & Scania adapter cable	1 684 463 776	•
MAN Series 2000 adapter cable	1 684 463 777	•
ABS module 1 adapter cable	1 684 463 778	•
ABS module 2 adapter cable	1 684 463 779	•
Wabco/Knorr adapter cable Trailer ABS/EBS	1 684 463 780	•
EB+ adapter cable	1 684 463 781	•
ISO 7638 adapter cable	1 684 463 782	•
Volvo bus ABS adapter cable	1 684 463 783	•
Volvo bus ECS adapter cable	1 684 463 784	•
ZF adapter cable	1 684 463 785	•
Iveco Daily adapter cable	1 684 463 786	•
VW LT / T4 adapter cable	1 684 463 787	•
Citroën/Peugeot Boxer adapter cable	1 684 463 788	•
Scania adapter cable (models with Bear of manufacture before 2004)	1 684 463 793	•
US adapter		
US protocol adapter cable, 6-pin	1 684 463 789	•
US protocol adapter cable, 9-pin	1 684 463 790	•
Cable sets		
Cable set for trucks	1 687 001 944	•
Cable set for trailers	1 687 001 945	•
Cable set for buses	1 687 001 946	•
Cable set for vans	1 687 001 947	•

#### The advantages for the workshop are convincing:

- ▶ Only one direct connection cable
- ► Fewer plug-in connections
- ► Easy, fast and interchange-proof Adaptation on the vehicle
- ▶ Simplified and intelligent multiplexer control
- ▶ Software-controlled selection of the communication pins

#### Case with vehicle-specific adaptations

for easy, fast and interchange-proof connections.

#### Cable set case for trucks

Item number 1 687 001 944



## **Adapter cables**

## for NEO | orange and ZF-TESTMAN



EBS 5.x 1-channel 1 684 463 872



EBS 5.x 2-channel 1 684 463 873



EBS 5.x 1-channel-MAN 1 684 463 874



EBS 5.x 2-channel-MAN 1 684 463 875



EBS 2 1-channel 1 684 463 876



EBS 2 1-channel-Volvo 1 684 463 877



EBS 2 2-channel 1 684 463 878



EBS 2 2-channel-Volvo 1 684 463 879



EBS 5.1-MB Actros 1 684 463 880



1 684 463 882



1 684 463 883



Data mirroring EBS 5 1 684 463 884



ABS 6 cab 1 684 463 885



ABS 6 chassis 1 684 463 886



Measuring box 1 684 463 881



ZF 9-pin with CAN 1 684 463 891



ZF Ecolife driving switch 1 684 463 892



ZF diagnostic cables, new Generation 1 684 463 893



Intermediate adapter NEO|orange for KTS Truck 1 684 463 871

## **Adapter cables**

## Data and facts

Special accessories	Item number	KTS Truck
NEO orange adapter cable		
Adapter cable for EBS 5.x 1-channel	1 684 463 872	•
Adapter cable for EBS 5.x 2-channel	1 684 463 873	•
Adapter cable for EBS 5.x 1-channel – MAN	1 684 463 874	•
Adapter cable for EBS 5.x 2-channel – MAN	1 684 463 875	•
Adapter cable for EBS 2 1-channel	1 684 463 876	•
Adapter cable for EBS 2 1-channel – Volvo	1 684 463 877	•
Adapter cable for EBS 2 2-channel	1 684 463 878	•
Adapter cable for EBS 2 2-channel – Volvo	1 684 463 879	•
Adapter cable for EBS 5.1 – MB Actros	1 684 463 880	•
Adapter cable for EAC 1	1 684 463 882	•
Adapter cable for EAC 2	1 684 463 883	•
Adapter cable for data mirroring EBS 5	1 684 463 884	•
Adapter cable for ABS 6 cab	1 684 463 885	•
Adapter cable for ABS 6 chassis	1 684 463 886	•
Measuring box		
Measuring box for adapter cables	1 684 463 881	•
Adapter cable for ZF-TESTMAN		
Adapter cable for ZF 9-pin with CAN	1 684 463 891	•
Adapter cable for ZF Ecolife driving switch	1 684 463 892	•
ZF diagnostic cables for new generation	1 684 463 893	•
Intermediate adapter		
Intermediate adapter NEO orange for KTS Truck	1 684 463 871	•



from 4 to 8 channels

Expansion kit

Item number 1 687 010 396

## What drives you, drives us.

Technology from Bosch is used in practically every vehicle in the world. For us, the focus is on people and helping them to stay mobile.

We have been dedicated to people for more than 125 years with our pioneering spirit, research, production and expertise.

Our dedication is an unwaivering commitment to providing them with a unique combination of parts, diagnostics, workshop equipment and services:

- state-of-the-art solutions for efficient vehicle repairs
- innovative workshop equipment and software also available on favorable lease terms
- the world's largest range of new and remanufactured spare parts
- fast, reliable delivery service
- expert customer care via our hotline
- extensive range of training courses
- specific sales and marketing support
- plus many other services

You can get original Bosch quality here:

Subject to technical and software changes

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