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Bosch Esitronic 2.0: future-proof and efficient working with latest updates

Bosch diagnostic tester with access to latest diagnostic protocols and technologies

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- ▶ Diagnosis and maintenance on Mercedes-Benz and FCA-group vehicles with access-protected interfaces remain possible using Esitronic
- ▶ Esitronic information type EBR – experience-based repair with more than a million real cases of application and vehicle combinations
- ▶ KTS 250 ECU diagnostic testers now with practical e-mailing function

Karlsruhe/Plochingen – Today, every third independent workshop in Europe uses Esitronic, the comprehensive workshop software from Bosch for multi-brand diagnosis on passenger cars, light commercial vehicles, trucks and off-highway vehicles. There are more than 200 000 active users worldwide. New practical features and functions within Esitronic software also support workshops in due time concerning future developments and constantly growing demands placed on diagnoses. This also includes diagnostic access to Mercedes-Benz and FCA-group vehicles with vehicle electronics protected against manipulation and unauthorized access as well as the information type “experience-based repair” (EBR). By now, the EBR database comprises practical notes and experiences shared about more than a million common repair cases and vehicle combinations. Moreover, the diagnostic tester KTS 250 has also been upgraded: The new version now also includes an e-mailing function easing everyday work for the mechanics using it.

Diagnosis and maintenance of protected vehicle electronics

Bosch Esitronic developers continuously work on making diagnostic processes even more efficient and easier for workshops. Esitronic software continues providing workshops with access to diagnostic data as well as service and repair information of Mercedes-Benz and FCA-group vehicles with protected vehicle electronics. So far, this works for the FCA-group (Fiat Chrysler Automobiles) “Security Gateway” as well as for Daimler “Seed & Key”. Additional

manufacturers with similar security concepts will follow. In addition, Bosch workshop equipment also supports new technologies such as Diagnostics over Internet Protocol (DoIP) or PassThru facilitating the communication with the vehicle-manufacturer service portals. With this, Bosch empowers workshops to continue performing diagnosis and maintenance tasks without any restrictions.

Experience-based repair solutions (EBR) resulting from everyday workshop business

The information type EBR has proven to be a very useful Esitronic tool for everyday workshop business. By means of an algorithm developed by Bosch, the EBR finder searches a multitude of sources – including forums and online posts – for common technical issues and their solutions. Experienced Bosch experts then develop practical and verified repair solutions based on the information thus obtained. Once a workshop employee faces one of these known errors during the vehicle diagnosis, Esitronic recommends a repair solution which has already proven its worth. Users can evaluate specific repair solutions once they used them. Solutions which have proven to be particularly useful thus receive a higher ranking. Esitronic will show them first. In this manner, workshops benefit from the experience of Esitronic users worldwide.

By now, the EBR database has grown to more than a million real cases of applications and vehicle combinations. To celebrate this figure, Bosch makes a special offer: Esitronic users who did not yet sign up for the info types SIS (Instructions for troubleshooting and repairs), P (Circuit diagrams and comfort systems) and EBR (experience-based repair – known error patterns) can try them out online and for free until the end of this year. Besides access to more than a million EBR repair solutions and vehicle combinations, users are thus also granted access to a comprehensive online database containing almost 400 000 test routines and troubleshooting documents in 16 000 manuals with more than nine million vehicle allocations and more than 270 000 circuit diagrams – 30 000 of which are for so-called comfort systems with almost three million vehicle allocations. The offer automatically ends on December 31, 2020 and does not require any cancellation.

Sending diagnostic protocols via e-mail right from KTS 250

The modern and compact all-in-one ECU diagnostic tester Bosch KTS 250 can be used for all vehicle-diagnostic functions, both at the workshop and as a mobile solution. Thanks to its intuitive software interface, it is extraordinarily user-friendly. With the latest update, KTS 250 is now also equipped with a practical e-mailing function. This allows, for instance, sending the protocols created at the vehicle diagnosis to a desktop computer or even right to the client. Several reports – even of different vehicles – can be attached to a single e-mail. Fixed or

regular recipients can be stored, subject and message body can be adapted and modified.

About Bosch Esitronic 2.0

Bosch Esitronic 2.0 is comprehensive diagnostic software for maintenance, diagnosis and repairs on vehicles. By now, the software bundle covers more than 90 000 vehicles of more than 150 different brands. Esitronic eases the troubleshooting at the workshop providing maintenance schedules, repair instructions and circuit diagrams. Using Esitronic 2.0 Online, all data and information are always up-to-date – without any need for time-consuming updates. Functions such as intelligent troubleshooting and experience-based repair (EBR) ensure reliable and efficient repair procedures.

Press photo: #3097576

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The Automotive Aftermarket division (AA) provides the aftermarket and repair shops worldwide with modern diagnostic and repair shop equipment and a wide range of spare parts – from new and exchange parts to repair solutions – for passenger cars and commercial vehicles. Its product portfolio includes products made as Bosch original equipment, as well as aftermarket products and services developed and manufactured in-house. About 14,000 associates in more than 150 countries, as well as a global logistics network, ensure that spare parts reach customers quickly and on time. AA supplies testing and repair-shop technology, diagnostic software, service training, and information services. In addition, the division is responsible for the “Bosch Service” repair-shop franchise, one of the world’s largest independent chains of repair-shops, with some 15,000 workshops, and more than 1,000 “AutoCrew” partners.

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New Bosch e-learning offer for location-independent, live and economical teaching of workshop know-how

Bosch webcasting for up to several hundred participants

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- ▶ Webcasting complements face-to-face trainings at Bosch Service Training Centers
- ▶ The chat allows the participants to ask live questions and to take part in discussions
- ▶ Depending on the topic, the webcasting can be recorded and repeated any number of times

Plochingen – Using a new, innovative training offer, Bosch now also teaches workshop associates up-to-date know-how by means live online trainings. Practical Bosch webcastings allow several hundred participants located at different places to follow technical trainings live and to ask questions right away using the chat function. The only requirements for a participation are a computer with screen or a mobile device (smartphone or tablet computer) as well as a stable internet connection. This makes Bosch webcasting an economical training alternative complementing Bosch face-to-face trainings.

Workshop employees who signed up for a Bosch webcasting receive a link to log into the virtual training room. Various/different platforms are available to do so. Webcastings can be attended by several members of staff of a workshop simultaneously. Furthermore, the participants are able to choose their individual training environment – such as, for instance, a comfortable, cozy and relaxing place.

Webcastings are carried out by experienced Bosch trainers

As is the case with technical face-to-face trainings, the webcasting online trainings are also performed by experienced Bosch trainers. Besides the cameraman, the team also includes a second trainer who keeps an eye on the chat answering the participants' questions right away or forwarding them to the webcasting trainer. Each training lasts approximately 45 minutes. To start with,

the trainer presents the respective topic for 30 minutes. Afterwards, the participants are given the opportunity to ask questions via chat in order to discuss with the trainer. In the aftermath of the training, the workshop employees will receive a certificate of participation. A video function allows recording the webcasting of certain topics in order to repeat it as often as desired.

Bosch webcasting is used for topics which can be taught digitally without need for the performance of practical tasks right on the vehicle. These can be dealing with Pass Thru interfaces connecting the users with the manufacturer portals in order to perform diagnoses, for instance, or handling the electronic maintenance booklet. Sensor and radar calibration using the Bosch ADAS system, checking and installation of lambda sensors as well as starter and alternator testing are additional topics taught by means of Bosch webcastings.

Positive feedback provided by participants

Bosch webcasting sessions are performed by the respective national Bosch Service Training Centers. Last year, some 5 000 participants have already been trained at more than 80 webcastings in Spain since the new e-learning format was first implemented there. Both the experience gained there and the feedbacks of the workshop participants were very positive. The Bosch organizations in Russia and Brazil have already successfully used the new training format as well. Dates for Bosch webcastings are now also offered to German, Austrian and Swiss workshops. As is the case with other Bosch trainings, the webcastings can also be booked online at www.bosch-training-solutions.com/de/.

Press photo: #3097539, #3097540, #3097541

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Bosch is reacting to current market requirements with its expanded range of batteries

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New “Eco Line” battery range for passenger cars; new additions for two-wheeler and truck batteries

- ▶ Eco Line starter batteries for solutions in line with the vehicle’s fair market value – ideal in a tough economic climate
- ▶ Two-wheeler batteries now “factory-activated” for greater convenience and ease of commissioning
- ▶ Bosch TA AGM commercial-vehicle battery for high energy requirements in demanding long-haul operations

Karlsruhe – Bosch is reacting to current market developments and new statutory requirements by expanding its already wide range of starter batteries for passenger cars, commercial vehicles, powered two-wheelers, and recreational vehicles like motor homes and motorboats.

Eco Line range offers a solution in line with a vehicle’s fair market value

In tough economic climates, the new Eco Line range of batteries for passenger cars represents both an expansion of the previous range of batteries and also a solution that is in line with the fair market value of older vehicles while upholding Bosch’s high quality standards. The batteries in Bosch’s new Eco Line range have also been designed for vehicles with start/stop systems. As a result, Bosch’s Eco Line offers a high-quality solution for the majority of vehicles in Europe. After its introduction in Germany, Eco Line will also be rolled out to other markets.

M4 and M6 two-wheeler batteries will be “factory-activated” in future

Bosch has made commissioning the M4 and M6 two-wheeler batteries simpler, safer, and more convenient for customers. In future, the batteries will be sold “factory-activated” – in other words, prefilled and activated at the plant. This will mean that the batteries are ready for immediate operation without needing to be filled from the acid pack provided before being put into service, as was previously the case. By making this change, Bosch is responding to a new EU regulation fundamentally prohibiting acid from being sold separately to consumers for safety

reasons. The lead–acid two-wheeler batteries will be available for the start of the new 2021 season. In addition, the M Li-ion two-wheeler battery remains in the portfolio. The ultra-light, extremely powerful two-wheeler battery with lithium-ion technology offers a service life that is four times longer than conventional lead–acid batteries, making it synonymous with pure driving fun, great dynamics, and safety. Bosch therefore expects that the market reception for the M Li-ion battery will continue to be positive.

TA AGM starter battery for powerful commercial vehicles

Since early 2020, Bosch’s product range has also included the ultra-high-performance TA AGM 12-volt commercial-vehicle starter battery that can satisfy the tougher requirements of today’s long-haul transportation. The TA AGM is the most powerful commercial-vehicle battery that Bosch has to offer. It reliably supplies energy to numerous electrical consumers, including parking cooler and parking heater. (See also Bosch’s press release on the TA AGM [link to the press portal](#))

Press photo: Eco Line AGM ([link to media pool](#))

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Solving sophisticated workshop problems even quicker using the Bosch Visual Connect app

Bosch expert virtually looks over the shoulder of the technician

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- ▶ Compared to normal communication systems, sophisticated problems are solved 50 percent faster thanks to Visual Connect
- ▶ Step by step, Bosch experts guide workshop technicians to a satisfactory solution via their smartphones
- ▶ Visual Connect is included in the subscription for technical support without incurring extra costs for the user

Karlsruhe/Plochingen – Sometimes even highly experienced workshop technicians cannot find a suitable solution for specific and highly sophisticated technical problems on customer vehicles. This is where a Bosch expert and the Bosch Visual Connect smartphone app combines to help out the workshop technicians. Workshop customers who subscribe to both Esitronic software and technical support, can get expert advice delivered straight to the workshop using their mobile devices. The smartphone camera allows the Bosch expert to literally look over the workshop employee's shoulder. For this purpose, the Visual Connect app sends the real-time images to the technical support. This allows the support specialist to see exactly what the workshop employee sees.

In fact, it is often anything but easy to describe sophisticated technical issues on the phone. The Visual Connect app, however, allows workshop employees to show the technical support experts their technical problems in every detail. Step by step, the member of the support team guides the technician to the solution. In addition to this, the technical support is able to draw on the screen as well as to display additional information such as circuit diagrams or the position of hidden components.

First call resolution of most problems thanks to Visual Connect

At the Bosch hotline, more than a 100 experts process the sophisticated problems step by step with the workshop staff in a live environment. This year

alone, they already helped out more than 5 000 cases. Not only have Visual Connect customers been supported in Germany, but users from many other countries such as Denmark, France, the United Kingdom, Italy, Switzerland, Spain, the USA, Russia and India have all benefitted from the app. It appears that by using the app, solutions can be found 50 percent faster than it would be the case with conventional communication channels. Furthermore, the rate of problems solved at the first contact with the technical support has also increased by 400 percent thanks to Visual Connect.

“Using Visual Connect, we see ourselves virtually at the workshop. This allows us to identify the problem quickly and to find the integral solution for it. This increases the workshop’s efficiency and saves time with ever more complicated repair processes,” Jörg Hornung, global manager technical support & service at Bosch Automotive Aftermarket explained.

At most workshops, smartphones have already become part of the daily working environment. Therefore, in most cases, the Visual Connect app can also be used without the need for additional equipment. The app itself is available for download at the Android and iOS app stores and is free of charge. Another important fact: Data protection is ensured at all times, even in cases where workshop employees use their personal smartphone in order to contact the technical support.

Press photo: #3097580

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Bosch Aerotwin windshield wiper with advanced wiper rubber profile

Improved wiper rubber lip for outstanding and very long-lasting wiping results

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- ▶ Advanced development of the Power Protection Plus (PPP) wiper rubber with patented coating and long-life wiper rubber profile
- ▶ Less abrasion and wear due to a special admixture in the blade's rubber compound
- ▶ Improved resistance to environmental influences and contamination on the windshield

Karlsruhe – Bosch has further refined and improved its tried-and-tested Aerotwin windshield wiper. With their PPP (Power Protection Plus) wiper rubber technology featuring a patented coating, Bosch Aerotwin windshield wipers have long been synonymous with quiet, outstanding wiping performance – even in extreme weather conditions. By admixing a special additive to the blade's rubber compound, Bosch developers have now succeeded in improving the edge of the windshield wiper even further. This makes the long-life wiper rubber profile considerably more resilient to environmental influences. The improved compound formula adds even more abrasion protection to the PPP rubber's already outstanding resistance to environmental influences, such as UV light and ozone. As such, the redesigned blades truly prove their worth when contamination on the windshield (such as insects, dust, pollen, or ice) has an unfavorable mechanical impact on the rubber blade's edge. This enables the Bosch Aerotwin to achieve outstanding, long-lasting, and streak-free wiping results thanks to its improved wiper rubber. When compared with conventional blades, Bosch's quality tests demonstrated that the new wiper rubber lip exhibit less abrasion and thus less wear.

Longer-lasting, excellent wiping results thanks to long-life wiper rubber profile

Furthermore, Aerotwin windshield wipers are equipped with two made-to-measure Evodium spring strips that increase the blade's contact pressure on the windshield

and distribute this pressure evenly along the entire length of the wiper. This firstly helps to achieve such consistent, streak-free wiping results. Secondly, the even contact pressure provided by the Evodium spring strips combines with the blade's new and improved rubber compound to improve resilience and reduce degradation on the wiper's edge.

Press photo: #3097581, #3097582

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Exhaust-gas temperature sensors and nitrogen-oxide sensors complement the Bosch workshop range

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Comprehensive product range contributing to exhaust-gas treatment from a single source

- ▶ New to the Bosch workshop range: exhaust-gas temperature sensors and nitrogen-oxide sensors
- ▶ Five different Bosch exhaust-gas sensors featuring OE quality
- ▶ Reliable monitoring for compliance with current emission standards

Karlsruhe – Nowadays, different sensors installed at the exhaust tract of modern passenger cars and commercial vehicles monitor the exhaust-gas composition with top precision. In this way, they make an important contribution to compliance with legal emission limits and the regulations concerning on-board diagnoses. Replacing defective and worn sensors is thus of major importance. Besides lambda sensors, particle sensors and differential-pressure sensors, the Bosch range has now also been complemented by exhaust-gas temperature sensors and – brand new – nitrogen-oxide sensors for most of the vehicles on the European market. Combining these sensors with the Denoxtronic exhaust-gas treatment system, workshops are provided with a comprehensive range of the exhaust-gas treatment components featuring OE quality.

Bosch builds on decades of experience in sensor technologies. Lambda sensors, for instance, are used to measure and optimize the air/fuel mixture of gasoline and diesel engines – and they were invented by Bosch. Bosch was a first-minute pioneer in terms of particle sensors monitoring diesel particle filters, as well. And Bosch also supplies vehicle manufacturers worldwide with large numbers of all exhaust-gas sensors.

Five exhaust-gas sensors help complying with the emission limits

Reliable analysis of the exhaust-gas composition is the basis for efficient exhaust-gas treatment. For this purpose, modern cars and commercial vehicles are equipped with different sensors installed into the exhaust duct. All of these sensors are integrated into the on-board diagnostic system and can easily be

identified and checked using a diagnostic tester such as, for instance, a Bosch KTS in case of any faults. If defective, Bosch sensors can be replaced both easily and quickly.

Nitrogen-oxide sensors

More and more diesel cars and a growing number of light and heavy commercial vehicles are equipped with nitrogen-oxide sensors. By means of a particularly resilient and heat-resistant ceramic sensor element, these sensors measure the amount of nitrogen oxide (NO_x) downstream of the SCR catalytic converter. Some engine types include a second nitrogen-oxide sensor upstream of the catalytic converter. These sensors control the amount of urea (AdBlue) injected into catalytic converter for the selective catalytic reduction (SCR) in order to reduce the NO_x emissions. In addition, they also monitor the SCR components. As SCR technology is used more frequently, nitrogen-oxide sensors are also of increasing importance for the aftermarket and workshop business. The current Bosch range comprises 24 part numbers including the matching sensors for several vehicles. And yet, the range is continuously expanded.

Exhaust-gas temperature sensors

Exhaust-gas temperature sensors can be installed at different locations within the exhaust duct of diesel and gasoline engines. They measure the temperature of exhaust gases and send an electric voltage signal to the engine control unit. Used in diesel engines, exhaust-gas temperature sensors monitor the temperature of the particle filter. Therefore, they significantly contribute to compliance with emission limit values and fuel efficiency. Used in gasoline engines, exhaust-gas temperature sensors are used to protect critical components such as e.g. Catalytic converters and turbochargers. Since July 2020, the Bosch aftermarket range for workshops comprises some 90 part numbers covering most of the vehicles of European car makers.

Particle sensors

Since 2019 already, workshops can order particle sensors at Bosch. The range comprising 40 part numbers is continuously expanded. Particle sensors analyze the amount of soot particle contained in diesel emissions by means of resistance measurement. Based on the values thus obtained, the control unit analyzes the functionality of the diesel particle filter. Prior to each measurement, the sensor element is regenerated by heating it up in order to keep the sensor in the same condition for all measurements.

Differential-pressure sensors

Differential-pressure sensors measure the pressure difference of the particle sensor: The values measured provide information on the condition of the particle

filter in order to trigger the demand-based and fuel-saving particle-filter regeneration – so-called selfcleaning or burning clean. Differential-pressure sensors are also used to control low-pressure exhaust-gas recirculation. The current Bosch range comprising more than 40 part numbers for these sensors covers most of the vehicles on the European market.

Lambda sensors

Lambda sensors determine the amount of oxygen contained in exhaust gases. Based on this value, the engine control unit determines the optimum fuel quantity to be injected into the combustion chamber. Lambda sensors are used in gasoline, diesel and gas engines. The Bosch range of lambda sensors includes a matching lambda sensor for more than 80 percent of all vehicles on the market. With their high measurement accuracy, these sensors actively support engine efficiency and effective exhaust-gas treatment. Compared to worn lambda sensors, new lambda sensors allow fuel savings of up to 15 percent.

Denoxtronic

The Denoxtronic exhaust-gas treatment system is also of increasing importance. Increasingly used in diesel-powered vehicles, it generates additional potentials for automotive workshops. This system injects a watery urea solution (known as AdBlue) into the exhaust duct. In combination with the SCR catalytic converter, this allows turning harmful nitrogen oxides (NO_x) into water and nitrogen. As Denoxtronic system developer, Bosch provides comprehensive solutions for workshops – reaching from diagnoses and spare parts through to repairs and technical trainings.

Press photo: #3097542

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