MDS 188 Premium – Two-in-one solution

Modern diagnostics systems have achieved a high level of precision and usually provide reliable and clear information regarding faults in vehicle systems. However, complex vehicle components, systems and control circuits also increase the complexity of the diagnostic steps required to isolate sources of error. If an error only occurs sporadically or if little is known about the error event, then it’s time to call on a mechatronics technician. With their expertise and understanding of the system, they are able to narrow down the fault step by step to clearly identify the actual cause of the fault and professional repair can be carried out. The acquisition and analysis of electrical signals is an invaluable tool for mechatronics engineers to troubleshoot complex systems, be it temperature, pulse speed and frequency, frequency, voltage or resistance. In modern vehicles, numerous sensors are installed, whose measured values indicate the system functionality and possible causes of faults.

Work more efficiently

Up to now, the diagnosis, measurement and interpretation of signals have been divided into two different work steps. "If the diagnostic system did not provide a clear error evaluation, then the workshop technician would have to stop working on the vehicle to connect an oscilloscope, for example," explains Andreas Wittig from AVL DiTEST. With the MDS 188 Premium diagnostic system, AVL DiTEST experts have now developed an intelligent tool for workshops that, as a multi-brand diagnostic system, also combines the functionalities of a fully-fledged measuring system in one device. "The advantage for the workshop mechanic is that they can take direct measurements using results from the diagnosis and compare it with the reference curves stored in the system. They do not have to interrupt work on the vehicle, nor is any time lost to additional set-up times," says Wittig. The device supports the user by means of a so-called user-guided measurement.

User-guided measurement

This means that the accessories that should be connected to the device for the desired measurement as well as the settings for the selected measurement, are...
The 2020-01 update for the XDS 1000 multi-brand diagnostic system includes updates for cars, light commercial vehicles, HGVs and trailers in spring 2020. The updates are a reflection of developments in the workshops. The need for electronic information on the configuration of driver assistance systems has increased dramatically in recent months. Assistance equipment combined under the collective term of Advanced Driver Assistance Systems, or ADAS, is increasingly demanding the attention of the workshops during maintenance and repair work. Systems such as lane assistants, emergency brake assistants or radar-guided distance assistants are now being included with vehicles in even the compact and small car classes. They can only function properly and with the required precision if all system components are operating optimally and are calibrated according to the manufacturer’s specifications. Something that many workshop customers often do not realize is that even bumps when parking can cause individual system components to be displaced by a few degrees, which is already enough to impair the function of assistance systems. Supposedly minimal deviations from the factory settings, for example, result in the automatic dipping of the headlight beam no longer functioning as intended on intelligent lighting systems. This results in oncoming traffic being dazzled and causing a hazard on the road.

**Diagnostic assistance systems**

Users of the XDS 1000 multi-brand diagnostic system should also apply the new update to their devices as soon as possible in the interest of general traffic safety. One focus of the 2020-01 update is additional diagnostic functions for assistance systems installed in Mercedes-Benz vehicles. After the update, it is possible, for example, to use the XDS 1000 to read out and clear error codes and also display measurement readings for the Brake Assist (A-Class, B-Class, Sprinter). The diagnosis and processing of error codes on the headlight electronics, radar sensors

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### XDS 1000 2020-01, What's new:

With the new update, the XDS 1000 multi-brand diagnostic tool now covers over 1,100 models from 75 car, HGV and trailer manufacturers.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dacia</td>
<td>Dokker, Duster 1.2, Logan 2, Lodgy, Sandero 2</td>
</tr>
<tr>
<td>Mercedes-Benz</td>
<td>A-Class (W177), B-Class (W247), E-Class (W213, 238), GLE (W167 X167/ C167), S-Class (W222), Sprinter III (907/910)</td>
</tr>
<tr>
<td>Opel/Vauxhall</td>
<td>Astra K, Astra J, Insignia B, Zafira C</td>
</tr>
<tr>
<td>Renault</td>
<td>Captur, Clio 4, Espace 5, Kadjar, Kangoo 2, Koleos 2, Master 3, Megane 4, Scenic 4, Talisman, Trafic 3</td>
</tr>
<tr>
<td>Smart</td>
<td>Forfour 453, Fortwo 453</td>
</tr>
</tbody>
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With the update, the AVL DiTEST experts have also expanded the variety of models for HGVs and trailers.
or comfort systems, such as climate control electronics, are also part of the 2020-01 update. With Opel and Vauxhall models, the main focus is on processing engine electronics error codes. For Dacia and Renault models, the AVL DiTEST experts have added the new additive control error codes in the XDS 1000 software release. For many Renault models, error code processing and measurement values for working on driver assistance and comfort systems are also available. As you would expect from AVL DiTEST, the new update will also increase the scope of information stored in the system for testing light commercial vehicles, HGVs and trailers.

The data on the Wabco E systems are now newly integrated into the system. With the 2020-01 update, the existing model range is updated and some new variants are added with the corresponding diagnostic data.

**HGVs and trailers updated**

With the update, the XDS 1000 multi-brand diagnostic system now contains data from a total of 32 HGV and LGV manufacturers, which covers more than 235 different models. In the car sector, the system includes data from 43 manufacturers and a total of 929 different vehicle models. The table (p. 2) shows just some of the updated model series.

As already introduced with the 2019-03 update, the experts at AVL DiTEST have used standardised domain names for the individual modules (engine electronics, gearbox electronics, air bag, etc.) across all manufacturers and model series. “Standardisation enables users to get their bearings and work with the system more quickly,” explains Martin Hofmann. Now, instead of dealing with manufacturer-specific terms, XDS 1000 users can find the controls they need under the same domain names for all manufacturers. Knowing the manufacturer-specific terminology is no longer necessary when working with the XDS 1000.

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**Three steps to the XDS 1000 online update**

It's now even easier and more convenient for users to install updates on their XDS 1000 multi-diagnostics device directly from the internet. It only takes three steps to complete: 1. Download the update: Download the 2020-01 software version to your XDS 1000 tablet/PC from the internet and then run the installation file on your device. 2. Start XDS 1000: Start your XDS 1000 and connect the USB port of your PC to the vehicle’s diagnostics port using your VCI 1000. Then double-click on the XDS symbol on the start screen and select "Interface selection: cable (USB)". Then select a vehicle and click on "AutoScan" or "ECU overview". The serial number of your VCI 1000 will be displayed on the screen. It is needed in order to activate the update. Enter your email address and your device’s serial number on the AVL DiTEST Website, which will request a 25-digit activation code for the software update on your device. Enter the code under "Product activation" to activate update 2020-01 on your XDS 1000. Alternatively, the update can also be downloaded and installed via Bluetooth. Users can find a step-by-step guide to downloading and installing software updates for the XDS 1000 here: https://www.avlditest.com/index.php/en/xds-updates.html
Data and information are now indispensable tools in the workshop and they can be crucial in the competition for customers. This gives an advantage to the workshop, which can offer fast and efficient solutions to customer problems. Based on the advertising slogan of a Swedish furniture store, the following applies to workshop employees today: “Still looking or already repairing?” A qualified and efficient repair is virtually impossible today without the right data and information. The basis for each troubleshooting action is the error diagnosis. If a fault is clearly identified in the vehicle system, there is nothing to prevent proper repair.

Repair information online
Replacing faulty components can be quite difficult. Difficult-to-access units, small spaces and special tools are just a few of the factors that can slow down the workshop technician trying to successfully repair the component. Especially when they have to deal with constantly changing vehicle brands and models in a multi-brand workshop. Having the right information on repairs at the workplace is an effective means of bypassing any obstacles. AVL DiTEST experts have created a special tool for the smooth and efficient day-to-day running of a workshop with the XIS Pro data and information system. The online database can be used 24 hours a day, 365 days a year, from any smart phone, tablet or PC no special tool is required!

Test access to the database
The XDS 1000 multi-brand diagnostic device is even more convenient. This can be connected directly to the XIS Pro database via WLAN. The repair information that the workshop technician can access via the XIS Pro includes vehicle-specific maintenance plans, removal and installation instructions, and tightening torques (see overview in the “XIS Pro in detail” box). “Of course, all the information in the system strictly complies with the manufacturer’s specifications,” says Martin Hofmann from AVL DiTEST. The newly updated version of the XIS Pro not only contains the extensive car database, but also information for LGVs, HGVs and trailers. Interested parties can test the performance of AVL DiTEST’s XIS Pro data and information system before purchasing their own license. The test access is available via the link opposite or directly via the QR code shown. 


AVL DITEST

XIS Pro in detail
• Maintenance information
• Removal and installation instructions
• Default values
• Operating materials and fill volumes and their specification
• Tightening torques incl. technical drawings
• Known measures and remedies
• Works value lists with integrated cost estimate
• Component tests with target values
• Circuit diagrams
• Component positions
• Support via electric testing methods
• Available round the clock thanks to online access
• Regular updates

Interested parties can try the XIS Pro for 30 days free of charge.

Presented by:

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XIS Pro – Still looking or already repairing?