



Diagnostics and ADAS

calibration solutions

for professionals, from professionals

The best solution

for any requirement

What started over 40 years ago in a small workshop is now one of the leading brands for vehicle diagnostics and workshop equipment in Europe. And for good reason: Every product from HELLA GUTMANN SOLUTIONS is still firmly rooted in the workshop. This is a great advantage in a world where workshops are confronted with an ever growing number of vehicle models and increasingly complex technology.



Are you interested in a high-tech diagnostic solution with in-depth measuring technology or a small mobile device for preliminary vehicle checks? Do you want to turn your workshop computer into a fully-fledged diagnostic device? HELLA GUTMANN SOLUTIONS has the perfect solution for every workshop challenge. Naturally, we also offer specialist products for businesses like body repair shops and service centres. What's more, we are also able to offer you a service package tailored exactly to your needs.

As a friend and partner of independent workshops HELLA GUTMANN SOLUTIONS has a clearly defined goal: We want you to get vehicles back on the road faster. Whatever the size of your workshop, discover the diagnostic world of HELLA GUTMANN SOLUTIONS and opt for one of our flexible systems which were developed in the workshop for the workshop. Offer your customers the best service and your workshop a solid basis for a successful future.

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**From professionals
for professionals**

**Vehicle diagnostics from
HELLA GUTMANN Solutions**



Faster, smarter, more accurate. Time is money. Everyone who has spent precious hours searching for a fault in the complicated on-board electronic systems of modern vehicles has experienced this painful truth.

Fully owned by HELLA, a leading tier one supplier of sensors, software and components to global OEM's, HELLA GUTMANN SOLUTIONS has the know how you can rely on.

MEGA MACS X

NEW



Item no.
8PD 015 265-861

Freedom of choice at all levels

The mega macs X provides utmost flexibility and a vast number of options regarding the hardware and software configurations. The choice is yours whether you wish to combine your existing tablet or PC with the mega macs X or the HELLA GUTMANN Tablet. The mega macs X is compatible with all major operating systems, enabling a wide choice of display options.

CAN FD, DOIP and Cyber Security are just a few of the features available to future proof your investment. The mega macs X, however, is not only flexible in its hardware, thanks to the different software modules, you can choose the software package that best suits your needs in the workshop. Like the complete mega macs range of diagnostic tools, ADAS Calibration software is included*.

Product features

- Precise measuring technology with step-by-step instructions and automatic nominal value/real value comparison (PIN DATA)
- Graphic representation of up to 16 vehicle parameters simultaneously
- Trouble code based, vehicle-specific repair aid in real time*
- Fast and direct access to vehicle selection with improved VIN input
- ADAS calibration software included*
- CAN FD & DOIP ready. Compatible with all major operating systems, Android, Windows, Apple IOS, Linux.
- Four different software module options

What's included

- mega macs X
- Charging tray
- Power adapter
- Power cord
- USB cable
- Quick start guide



| MEGA MACS X | |
|---|---|
| Supply voltage | 12V–24 VDC |
| Temperature of work area | 0 to 45 °C |
| Storage temperature | -10 to 50 °C |
| Weight | 1420 g |
| Dimensions | 210 x 193 x 80 mm (H x W x D) |
| Requirements on an external displaying device | <ul style="list-style-type: none"> • Screen diagonal 25.4 cm (10") • Screen resolution at least 1024 x 768 Pixel • Wi-Fi corresponds to IEEE 802.11 n • Google Chrome browser at least version 81 |



* Licence X2 and above

OPTIONAL EQUIPMENT FOR THE MEGA MACS X



Item no.
8PD 015 265-971

HELLA GUTMANN SOLUTIONS Tablet

We have selected this tablet carefully while paying special attention to speed, reliability and robustness and it is geared to the diagnostic processes with the mega macs X. This modern Android tablet comes with a docking station, which includes various interfaces (HDMI, Ethernet etc.).

Thanks to the integrated setup wizard, the tablet and mega macs X are connected automatically allowing you to start work instantly. The software contents of the tablet are limited to the essential functions: The interaction with the mega macs X for diagnostic work and the use of the e-mail function and the web browser.

The download of Apps from the Internet to the HELLA GUTMANN Tablet is intentionally blocked to ensure fast working of your operating/displaying device.

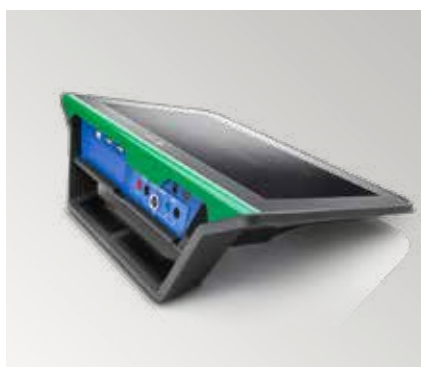
| HELLA GUTMANN TABLET | |
|---------------------------|--|
| Software | Android 9.0 |
| Operating temperature | -10 to 50 °C |
| Processor | Rockchip RK3399 |
| RAM/data storage capacity | 4 GB RAM, 64 GB eMMC |
| Display | X10.1" WUXGA 1200x 1920 IPS, 470 nits |
| Audio | 1 digital microphone 2 integrated speakers |
| Input | 10-point multi-touch, glove, with capacitive stylus, glove mode and wet-touch mode |
| Interfaces | Docking station, USB 3.0, USB 2.0, Micro USB 2.0 |
| Remote interfaces | Wi-Fi IEEE 802.11 a/b/g/n/ac, Bluetooth® 4.1, Bluetooth® 4.2 |
| Battery charging voltage | 3.7V |
| Battery capacity | 10,800 Ah / 40 Wh |
| Battery run time | up to 8.5 h |
| Dimensions | 283.4 mm x 192 mm x 21.9 mm |
| Weight | 1280g |

MEGA MACS 77



Item no.

8PD 015 265-041



Fast diagnostics and extended data from HELLA GUTMANN SOLUTIONS

Fast diagnosis and effective repair support are key elements for long-term economic success. With a brand-new diagnostic software and operating concept, HELLA GUTMANN SOLUTIONS is now setting the standard for faster car repair and service: Available accessories include a heavy duty carry case and measurement module.

Product features

- Extra-large 15.6" full HD touchscreen
- Precise measuring technology with step-by-step instructions and automatic nominal value/real value comparison (PIN DATA)
- Graphic representation of up to 16 vehicle parameters simultaneously
- Trouble code based, vehicle-specific repair aid in real time*
- Fast and direct access to Vehicle selection and improved VIN input
- Direct overview of all applications, diagnostic functions and vehicle information via the app launcher
- Comprehensive search in all components listed in the system

What's included

- mega macs 77
- DT VCI
- Docking station
- Power adapter
- Power cord (country-specific)
- USB cable for VCI
- USB cable for mega macs 77
- Lanyard
- Pen drive with drivers
- Shipping carton
- Quick start guide

TECHNICAL DATA

| | |
|--------------------------|--|
| Supply voltage | 15 V |
| Current draw | max. 5 A |
| Temp. of work area | 0 to +45 °C |
| Temp. of storage area | -10 to +60 °C |
| Weight | 3800 g (incl. battery and 2 blind modules) |
| Dimensions | 131 x 421 x 314 mm (H x W x D) |
| Display | 15.6" widescreen, 1920 x 1080 pixels (full HD), LED backlight |
| Input | Capacitive touch screen |
| Processor | Snapdragon 600 E® Qualcomm® Krait™ 300 quad-core CPU, 1.7 GHz |
| Operating system | Linux 32 bit |
| RAM | 2 GB LPDDR2, 533 MHz |
| Data storage capacity | 32 GB eMMC |
| Interfaces | 2 x USB 2.0 host interface (type A); 1 x USB 2.0 device interface (type B); 1 x docking interface (to docking station); 1 x power supply socket |
| Wireless interfaces | WiFi; IEEE 802.11 a/b/g/n/ac; Bluetooth®; v 4.2 class 1 |
| Additions | 2 x module slot |
| Power adapter | Input: 100–240 V AC, 1.5 A, 50 Hz/60 Hz Output: 15 V DC, 6.67 A |
| Average battery run time | 4 h (operating without module inserted) |
| Resolution | 14 bit |

* In connection with a Repair Plus licence (licence scope may vary depending on country).

LPD-KIT



The all-in-one solution for low-pressure measurements

With the LPD-Kit (low pressure diagnostic kit) from HELLA GUTMANN SOLUTIONS, you will be able to carry out all relevant pressure tests in a single quick and easy step. Even the smallest discrepancies are quickly and easily identified. The low pressure test set is a low cost, yet high quality device for all important pressure measurements.

Product features

- Cylinder pressure measurement
- Compression test
- TDC search
- Intake manifold pressure and boost pressure measurement
- Fuel pressure measurement
- Distributor-type injection pump measurement
- Return flow pressure measurement
- System pressure measurement
- Oil pressure measurement
- ...and much more.

Item no.

8PZ 010 607-731

LPD-Kit

Low Pressure Diagnostic Kit – low-pressure test set incl. pressure sensors for up to 60 bar (only in connection with measurement module MT 77)

Item no.

8PZ 010 603-921

LPD-Kit adapter set 1

Adapters for Ford, Citroën, Peugeot, Jaguar (ZKD 26 + 40 + 49)

Item no.

8PZ 010 603-911

LPD-Kit adapter set 2

Adapters for Vauxhall, Alfa Romeo, Fiat, Isuzu, Lancia, Mazda (ZKD 41 + 42 + 43)

Item no.

8PZ 010 607-771

LPD-Kit adapter set 3

- KPA 09, spark plug adapter (flexible), M 12 x 1,25 with VG5 internal thread
- KPA 03, spark plug adapter M 10 x 1 (used only with KPA 09)
- DPAK 96, fuel pressure test adapter, Schrader thread 7/16"-20 UNF
- DPAK 97, fuel pressure test adapter, Schrader thread VG8
- DPAK 4, fuel pressure test adapter, tandem pump (pump-nozzle)

MEGA MACS 56



Item no.

8PD 015 265-031

The compact diagnostic solution with real-time repair concept

The mega macs 56 is not only extremely compact, but also agile and efficient when it comes to vehicle communication and interpreting fault codes. With onboard data for more than 40,000 vehicle models and a large 10.4" high resolution screen, when equipped with the optional measurement module, the 2 channel oscilloscope has the capability to depict up to 12 parameters simultaneously. The mega macs 56 is an ideal device for today's workshops.

Product features

- Trouble code based solutions in real time*
- Symptom-based solutions*
- Reading and deleting trouble codes in all ECUs
- Graphic representation of parameters with explanations (up to 12 parameters simultaneously)
- Comprehensive technical data* (timing belt, fuse box layout, etc.)
- Clear vehicle identification through VIN
- Wireless data transfer via VCI
- Actuator test
- Basic setting
- Codings
- Digital compression test**
- Car History
- PassThru-capable
- Compatible with CSC-Tool
- Service reset

What's included

- DT-VCI (wireless communication module)
- Bluetooth adapter
- USB cables (device & host)
- Power supply and cable

Optional Accessories

- Heavy duty carry case
- Docking station
- Measurement module

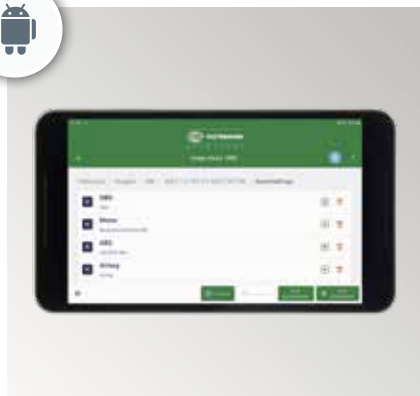
TECHNICAL DATA

| | |
|--------------------------|---|
| Display | Capacitive 10.4" (1024x768 XGA), no stylus required, easier operation since less pressure on display is necessary |
| Mainboard | Operating system Linux, 800 MHz ARM-CPU, 512MB SDRAM |
| Interfaces | USB (device & host) WiFi Bluetooth® 1 x slot for measurement module 1 x reserve slot (for future additions) |
| Battery | All-in-one module, run time up to 5 hours, built-in charge controller for battery diagnosis |
| Docking station*** | For fast battery charging |
| Dimensions | 310x265x100 mm (LxWxH) |
| Weight of mega macs 56 | 2200g including battery and module |
| Weight of VCI | 80g |
| Operating range outside | max. 50m |
| Operating range inside | 3 to 10m |
| Work area | 0 to 45°C recommended: 10 to 35°C |
| Battery charging voltage | 12.5 to 8V |
| Supply voltage | 10 to 15V |

* In connection with a Repair Plus licence (licence scope may vary depending on country)

** Possible via diagnosis depending on vehicle

MEGA MACS ONE



Item no. **8PD 015 265-101**
mega macs ONE

The software (app) is downloaded via
the Google Play Store.

Item no. **8PY 010 609-341**
mega macs ONE basic software

The Android solution for diagnostics all-rounders

The mega macs ONE is a newly developed Android-based diagnostic platform incorporating decades of experience with vehicle diagnostics from HELLA GUTMANN. The interface is intuitive, self-explanatory, clearly laid out and user-friendly, allowing the user to quickly get results on the condition of the relevant vehicle.

But that's not all: the HELLA GUTMANN app combined with the pre-installed apps of your choice makes your tablet a fantastic allrounder. You can diagnose and communicate, retrieve additional information from the web to your workstation, monitor your time management and much more, using just a single device.

All the diagnostic functions available on the mega macs ONE are the same as those on conventional mega macs diagnostic tools. These range from displaying the OBD interface in the vehicle, to reading/deleting trouble codes, resetting service intervals, parameter depictions (up to 16 at the same time), basic settings and actuator tests.

Advantages at a glance

- No connection to HGS drivers necessary
- Diagnostic results via mail as PDF
- Rapid and precise vehicle identification
- Indication of OBD interface inside the vehicle
- Compatible with Android 6.0 and higher
- Communication (Internet, Bluetooth®) via tablet
- Easy download via Google Play Store
- Easy update handling
- Works on tablets with minimum 7" screen size
- Flexible views (landscape and portrait format)

What's included

- mega macs ONE VCI
- Packaging
- Lanyard
- Quick start guide

TECHNICAL DATA

| | |
|-------------------------|-----------------------|
| Frequency band | 2.4 GHz |
| Data transfer rate | max. 3Mbit/s |
| Operating range inside | 3 to 10m |
| Operating range outside | max. 50m |
| Dimensions | 110x50x26 mm (LxWxH) |
| Interfaces | Micro-USB, Bluetooth® |

SYSTEM REQUIREMENTS

| | |
|------------------------|--|
| Minimum | Android 6.0 |
| Hardware | 1.5 GB RAM WXGA (1280x800) 1 GB storage capacity Bluetooth® Class 1 Bluetooth® 2.1 DER |
| Tablet screen diagonal | 7" (minimum) 8" or larger (recommended) |

MEGA MACS PC



Item no. **8PD 010 601-931**

Hardware package

Item no. **8PY 010 600-911**

Basic software

Transform your workshop PC into a fully-fledged diagnostic unit

The mega macs PC diagnostic software offers workshops the widest possible scope of services without costing an arm and a leg. What's more, there is no need to invest in an additional device. Just vamp up your workshop computer.

The scope of services of the mega macs PC includes functions such as reading and deleting trouble codes, graphic representation of parameters, actuator tests, basic settings, codings, service resets, automatic storage of vehicle data and ADAS calibrations.

In connection with the Repair Plus Light licence, you can expand the scope of services offered by mega macs PC and access an abundance of technical data and background information. You can access this information directly on your laptop, tablet or workshop PC: Component help, inspection data, timing belt data, technical data, wiring diagrams, fuses, component test values, flat rate units, emission data and much more.

Product features

- First fully fledged diagnostic software from HELLA GUTMANN
- Reading and deleting trouble codes in all ECUs
- Graphic representation of parameters with explanations (8 parameters)
- Actuator test
- Service reset
- Codings and basic settings
- Wireless communication
- Quick and clear vehicle identification through VIN
- Full scope of technical data and diagnostics in one solution*
- Integrated wiring diagrams, fuses/relays, flat rate units, timing belt data, etc.**
- Regular updates**

What's included

- mega macs PC VCI
- Packaging
- Lanyard
- Quick start guide

SYSTEM REQUIREMENTS

| | |
|---------------|---|
| Minimum | Microsoft Windows 7 |
| Hardware | 512 MB RAM 2 GB hard disk space USB 2.0 interface |
| PC VCI | |
| Dimensions | 110x50x26 mm (LxWxH) |

* Only on Windows-based systems/devices (except RT)

** Available with Repair Plus Light licence

HGS DATA



Item no. **8PY 101 609-491**
Repair Plus Light stand alone



Technical data for over 35,000 vehicle models

HGS Data is your indispensable, interactive knowledge database for everyday use. It is one of the biggest in the world and pays off from Day One. It provides you with fast, clear access to vehicle data, technical information and, of course, many useful tips and tricks, compiled for you by our experts from hundreds of thousands of support enquiries and solutions offered by other workshops. This is how everyone in the HELLA GUTMANN family helps one other.

Advantages at a glance

- Up-to-the-minute technical data
- Many practice-oriented tips and tricks
- Service schedules of all important brands

Product features

- Symptoms-based troubleshooting
- Parts dialogue with information on the selected part
- E-mail cloud for maintaining the requests
- TecDoc checklist
- Overview of the last 10 processed vehicles*
- Technical data on more than 35,000 models
- Service schedules of all important brands
- Coloured wiring diagrams in pin-sharp resolution
- Fuse/relay box images
- Component test values with additional information
- Exhaust emission data
- and much more

* The tool will save vehicles for which the licence plate number is entered.



Relay box images



Wiring diagrams



Engine compartment images



Component test values



Maximum safety

on the road –

ADAS calibration

Most new vehicles sold today are equipped with Advanced Driver Assist Systems (ADAS) such as Adaptive Cruise Control, Lane Keeping Assist or Autonomous Emergency Braking (AEB). These advanced driver assistance systems are becoming more and more relevant to workshops.

Independent workshops which intend to calibrate camera and radar systems of modern vehicles equivalent to original manufacturer's specification require the CSC-Tool and the ADAS extensions from HELLA GUTMANN SOLUTIONS – a reliable and accurate system covering all the relevant makes and models.



FRONT CAMERA & RADAR CALIBRATION

NEW



Item no. **8PD 015 269-101**
CSC-Tool Digital

All accessories from the CSC-Tool range such as Radar Kit I EVO or Rear Cam Kit can of course also be integrated into the CSC-Tool Digital.

CSC-Tool Digital

The new CSC-Tool Digital is the space-saving alternative to the CSC-Tool SE: The large-format calibration targets for front cameras are provided digitally and projected onto the projection surface of the CSC-Tool Digital in the workshop via the associated short-throw projector

The user can flexibly choose between different purchase options such as time-limited use or an annual flat rate. The purchase of individual reference panels is also possible. The digital calibration targets are transmitted to the projector via an Apple TV unit, which is included in the delivery contents and fixed to the upper edge of the screen. The required targets are controlled and selected via remote control.

Advantages at a glance

- The digital targets are available on demand
- New vehicle models can be calibrated sooner
- There is less space and logistics required to source and store targets
- Projection produces significantly less reflection and mirroring compared to screen technology
- The easy way of selecting the reference panels via remote control is practical and saves time: In the case of Honda, for example, three different reference panels are necessary

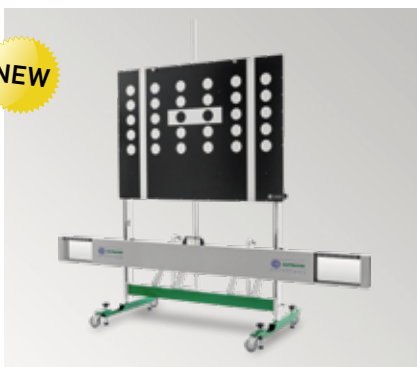
Requirements

- Wheel Clamp Module SE
8PZ 015 269-131

What's included

- 1x base frame incl. 2x lifting cylinders
- 1x projection surface
- 2x adjustable foot
- 1x measuring rod and cross member
- 1x operating element, control unit and wiring
- 2x wheel clamp "Distance"
- 1x short-throw projector
- 1x short-throw projector mount
- 1x Apple TV incl. power cord and remote control
- 1x Apple TV mount
- 1x HDMI cable
- 2x laser distance meter incl. mount
- 1x product packaging

NEW



Item no. **8PD 015 269-101**
CSC-Tool SE

CSC-Tool SE

Numerous improvements of the CSC-Tool SE (Second Edition) provide a faster and simpler set up to the vehicle, saving time. In addition, there is an option to add an analogue 4-wheel alignment system (see page 22).

Advantages at a glance

- One person only required for spring-supported height adjustment of the cross member
- Option to adjust to different camera and radar systems
- Base support with recesses for extremely low positioning of the angular adjustment plate
- Upgradeable at any time
- Documentation of adjustment/calibration as hard-copy printout and in the Car History
- Excellent measuring accuracy
- Compatible with the diagnostic devices of the mega macs family

What's included

- Base support incl. cross member
- VAG reference panel
- Measuring rod (2000 mm)
- Mounting kit

Requirements

- Wheel clamp module SE
8PZ 015 269-131
- Additional reference panels available

NEW

Item no. **8PZ 015 269-131**
Wheel clamp module SE

Wheel Clamp Module SE

The new wheel clamp modules SE are a precondition for the centering and parallel positioning of the CSC-Tool SE in reference to the rear axle.

- Fast positioning of the CSC-Tool SE in front of the vehicle
- Centre and align the tool parallel to the rear axle just in a few steps thanks to the green line laser
- Significantly higher ease of use

The wheel clamp modules SE are required for performing calibrations.



Item no. **8PZ 010 624-001**
CSC-Tool Mobile

CSC-Tool Mobile

The CSC-Tool Mobile creates opportunities for mobile calibration support for glass repair services, service providers for transport fleets and associated workshops. The mobile version of the CSC-Tool SE also corresponds to the most stringent manufacturer specifications – provided that the setup area meets the specific environmental requirements.

Advantages at a glance

- Sturdy, compact and well transportable (e.g.: in minivan or transporter)
- Safe transport in wooden multi-purpose packaging
- Can be assembled and disassembled by one person
- Multi-brand solution

What's included*

- Mobile base support
- Insertable top frame
- Cross member with extendable mirrors
- Measuring rod (1800 mm)
- Mounting set
- Wheel alignment module (2 pieces)
- Socket wrench

* Reference panels are not part of the basic delivery contents.

Optional accessories

- Lock detent pawl for fixing the cross member to the base frame (see accessories page 23)

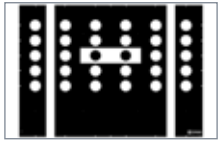
Requirements

- A range of reference panels available (see page 16)

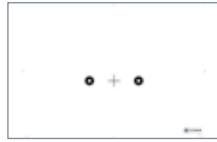
REFERENCE PANELS FOR CAMERA CALIBRATION

To calibrate the camera system of a vehicle according to manufacturer's specifications, the CSC-Tool and the CSC-Tool SE require brand-specific reference panels.

The same number of reference panels is available for the CSC-Tool Mobile. These differ in size to the panels for the CSC-Tool and or CSC-Tool SE and some can be folded to max. 100x50 cm.



VAG Group
Basic delivery contents
8PZ 010 624-011 (M-01)



Mercedes-Benz
8PD 010 601-901 (1-02)
8PZ 010 624-021 (M-02)



Renault
8PZ 010 607-951 (1-03)
8PZ 010 624-031 (M-03)



Nissan | Mercedes-Benz
8PZ 010 607-961 (1-04)
8PZ 010 624-041 (M-04)



KIA | Hyundai | Opel/Vauxhall |
Peugeot | Citroën | DS Auto-
mobiles | Fiat | Jeep
8PZ 010 607-971 (1-05)
8PZ 010 624-051 (M-05)



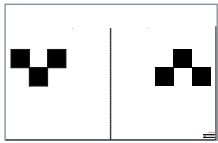
Honda
8PZ 010 607-981 (1-06)
8PZ 010 624-061 (M-06)



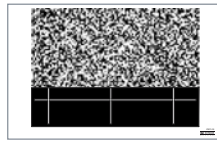
Mazda
8PZ 010 607-991 (1-07)
8PZ 010 624-071 (M-07)



Toyota | Lexus
8PZ 010 611-181 (1-08)
8PZ 010 624-081 (M-08)



Honda
8PZ 010 611-451 (1-09)
8PZ 010 624-091 (M-09)



Subaru
8PZ 010 611-461 (1-10)
8PZ 010 624-101 (M-10)



Toyota
8PZ 010 611-471 (1-11)
8PZ 010 624-111 (M-11)



Mazda
8PZ 010 611-631 (1-12)
8PZ 010 624-121 (M-12)



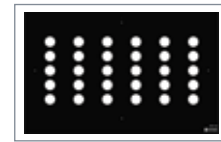
Toyota | Lexus
8PZ 010 611-641 (1-13)
8PZ 010 624-131 (M-13)



Toyota | Lexus
8PZ 010 611-651 (1-14)
8PZ 010 624-141 (M-14)



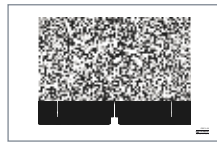
Honda
8PZ 010 611-831 (1-15)
8PZ 010 624-151 (M-15)



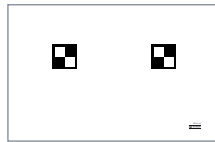
Fiat | Alfa Romeo
8PZ 010 611-841 (1-16)
8PZ 010 624-161 (M-16)



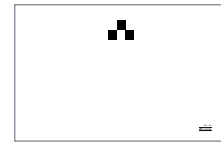
Mitsubishi
8PZ 010 611-881 (1-17)
8PZ 010 624-171 (M-17)



Suzuki
8PZ 010 611-911 (1-18)
8PZ 010 624-181 (M-18)



Suzuki
8PZ 010 611-921 (1-19)
8PZ 010 624-191 (M-19)

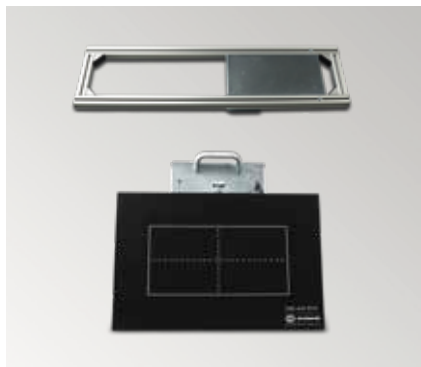


Hyundai
8PZ 010 611-931 (1-20)
8PZ 010 624-201 (M-20)

For further information about compatibility of reference panels with specific vehicle models contact Technical Support on **1800 061 729** or email hgscustomersupport@hella.com

(M) = CSC-Tool Mobile

CALIBRATION OF RADAR SENSORS



Item no. **8PZ 010 611-981**
Radar Kit I EVO = angular adjustment plate EVO + system mount

Radar Kit I EVO

Today, many service and repair tasks also entail the calibration of the radar system. These include collision repair work, wheel or camber adjustment, the addition of ride height altering components to the suspension system or a standard service task such as a lock carrier having been set to maintenance position (e.g. during timing belt replacement). All these tasks require system calibration.

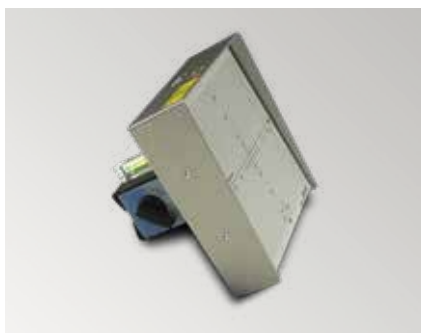
With the Radar Kit I EVO, you can calibrate radar sensors at almost any height. This gives the CSC-Tool and all its versions the necessary flexibility. An essential part of this new tool is the ingenious system mount which allows continuously variable vertical movement, e.g. of the angular adjustment plate and of the new reference panel for laser sensor calibration on the latest Audi models.

Advantages at a glance

- Vertical, continuously variable movement of angular adjustment plate
- Compatible with all versions of the CSC-Tool
- The system mount is the basis for future ADAS hardware extensions.
- Adjustment of angular plate via a simple rotary cam

What's included

- System mount
- Angular adjustment plate EVO



Item no. **8PZ 010 611-321**
Magnetic laser

Magnetic Laser

The magnetic laser is used to adjust certain radar sensors. To do this, the laser beam is directed either onto the mirror of the radar sensor or onto the mounted mirror of the Radar Kit II (CSC 4-03) and then correctly adjusted by using the reflected laser point.

Product characteristics

- With the magnetic laser, the radar sensor can be set to zero position before the calibration which makes the calibration procedure faster and easier. The magnetic laser is a valuable tool for replacing radar sensors.
- Exact positioning of EVO plate towards the centre of the radar sensor

What's included

- Magnetic laser
- Case

Requirements

- Radar Kit I EVO



Item no. **8PZ 010 611-251**
Radar Kit II

Radar Kit II

Radar Kit II for calibrating the radar sensors from Mercedes-Benz (radar sensors without mirrors).

What's included

- Case
- Mirror adjustment device with vacuum bell
- Centering ring for vehicles as from 2004
- Centering ring for E-Class
- Manual vacuum pump
- Adjustment tool
- Vaseline

Requirements

- Radar Kit I or Radar Kit I EVO
- Magnetic laser



Item no. **8PZ 015 269-051**
Radar Kit III

Radar Kit III

The Radar Kit III consists of a rotating base with a glass-fiber reinforced plastic rod, a laser module and 2 radar reflectors. The kit is designed for calibrating front and rear radar sensors. For this purpose, different radar reflectors are used depending on the manufacturer.

What's included

- 1 x CSC 4-04 radar reflector
- 1 x CSC 4-05 radar reflector
- 1 x Base incl. glass-fiber reinforced plastic rod
- 1 x Laser module

Requirements

- Rear Cam Kit I – Basic Profile
- Wheel Clamp Module SE
- Positioning aid for radar reflector if needed



Item no. **8PZ 015 269-041**
Radar reflector positioning aid

Positioning Aid for Radar Reflector

Together with the Rear Cam Kit I – Basic Profile the radar reflector positioning aid allows the the exact positioning of the CSC 4-04/4-05 radar reflector (part of the Radar Kit III) during the course of rear radar sensor calibration.

What's included

- 1 x Positioning aid

Requirements

- Rear Cam Kit I Basic Profile
- Radar Kit III



Item no. **8PZ 015 269-001**
Radar reflector

CSC 4-06 Radar Reflector

With the CSC 4-06 radar reflector, the radar sensors of systems such as lane change assist and blind spot monitoring can be calibrated. The CSC 4-06 radar reflector is adapted to the Rear Cam Kit I – Basic & Rear Cam Kit I Addition.

What's included

- 1 x Radar reflector CSC 4-06
- 1 x Power adapter
- 1 x Operating instructions

Requirements

- Rear Cam Kit I Basic Profile
- Rear Cam Kit I Basic CSC 2-01 reference panel
- Rear Cam Kit I Addition Profile

CALIBRATION OF LASER SENSORS



Item no. **8PZ 010 624-961**
Reference panel laser sensor

Reference panel laser sensors (LiDAR)

Advantages at a glance

- Continuously variable, vertical movement
- Compatible with all previous versions of the CSC-Tool
- Calibration of laser scanner in recent Audi models

Basic delivery contents

- Reference panels for laser sensor CSC 5-01

Requirements

- Radar Kit I EVO

REARVIEW CAMERA CALIBRATION



Rear Cam Kit I – Basic Profile and VAG reference panel 2-01

Rear Cam Kit I – Basic

Together with the mega macs software, the Rear Cam Kits I+II enable the exact calibration of all-round vision camera system and rearview camera. These cameras must also be aligned exactly to the vehicle's thrust line (rear axle) according to the manufacturer's specifications. The kits further expand the capabilities of the CSC-Tool, CSC-Tool SE and CSC-Tool Digital and utilise a multipiece reference panel system in frame structure (Rear Cam Kit I – Basic + Addition).

Rear Cam Kit I – Basic Profile

The Rear Cam Kit I – Basic Profile is also required for the alignment in the course of radar sensor calibration (Radar Kit III + CSC 4-06 radar reflector, page 18).

What's included

- 1 x base support (2 pcs.)
- 2 x slide
- 2 x tape measure with holder
- 4 x Mounting bolts
- 2 x Stabilising plate

Item no. **8PZ 010 611-601**
Rear Cam Kit I – Basic Profile



Item no. **8PZ 010 611-611**
Rear Cam Kit I – Addition

Rear Cam Kit I – Addition

What's included – Addition

- 2 x Reference panel fastening profile
- 2 x Mounting set for reference panel

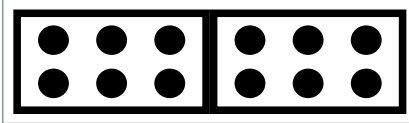
* VAG 2-01 reference panel on the floor and VAG 3-01 addition (see image) are not included in the delivery contents



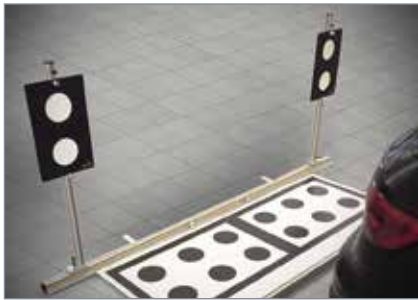
Rear Cam Kit I – Basic Target Kit

What's included

- VAG reference panel 2-01
- Mercedes-Benz reference panel 2-02



Item no. **8PZ 010 611-691**
Rear Cam Kit I – Basic reference panels



Rear Cam Kit I – Addition VAG Reference Panel Set

What's included

- 2 x VAG reference panel 3-01

Item no. **8PZ 010 611-681**
Rear Cam Kit I – Addition VAG
Reference Panel Set

* Basic profile and VAG 2-01 reference panel on the floor (depicted in image) are not included in the delivery contents



Reference panel Nissan 2-03



Reference panel Nissan 2-04



Reference panel Nissan 2-05

Nissan Rear Cam Kit I – Basic

Advantages at a glance

- Currently, it is possible to calibrate the rear-view cameras in various models of VW, Audi, Seat, Skoda, Mercedes-Benz & Nissan. Refer to the current list of covered vehicles for details.
- Manufacturer list and model range can be added to

- An even surface is required for calibration of camera systems
- Multibrand solution (can be added to at any time)

What's included

- Nissan 2-03
- Nissan 2-04
- Nissan 2-05

Requirements

- Rear Cam Kit I – Basic Profile
- Wheel clamp module

Item no. **8PZ 010 611-971**
Nissan Rear Cam Kit I – Basic
set of Nissan reference panels

ALL-ROUND VISION CAMERA CALIBRATION



Set of VAG calibration mats 3-02

Item no. **8PZ 010 611-621**
 Rear Cam Kit II – Side
 Set of VAG calibration mats

Rear Cam Kit II – Side

All-round vision camera systems are calibrated with the help of the roll-out calibration mats. The space-saving mats are robust and can be walked on.

What's included

- 2 x Calibration mat VAG 3-02
- 4 x End Rail



Set of Mazda calibration mats 3-03

Item no. **8PZ 010 624-931**
 Rear Cam Kit II – Side
 Set of Mazda calibration mats

Reference Panel Mats - Mazda

All-round vision camera systems are calibrated with the help of the roll-out calibration mats. The space-saving mats are robust and can be walked on.

What's included

- 2 x Calibration mat Mazda 3-03
- 4 x End Rail

WHEEL ALIGNMENT MEASUREMENT



Item no. **8PD 015 269-301**
Wheel Alignment Kit

Wheel Alignment Kit

The Wheel Alignment Kit in connection with the CSC-Tool SE and CSC-Tool Digital provides various wheel alignment measurement options. The Wheel Alignment Kit provides the fast alignment of toe, camber, toe-out on turns, caster, kpi, straight-ahead position of steering wheel and thrust angle. A leveled workshop floor or vehicle hoist is not necessary.

Advantages at a glance

- Universal application for passenger cars/ LCVs/ off-road vehicles
- Measurement possible without the need to lift the vehicle
- All vehicle types can be aligned quickly with one system
- You can use the Wheel Alignment Kit flexibly for 4-wheel alignments without the need of a fixed workspace
- Inclinometer for measurement of camber, caster and King Pin Inclination / Thrust Angle
- Easy attachment to all wheels
- Rim size up to 22": Adapters for 24" rims are optionally available with standard wheel alignment modules
- 360° rotating line laser module
- Rim runout compensation possible
- Excellent cost/performance ratio guarantees rapid amortisation

What's included

- 2 x wheel clamp modules WA incl. green line laser and scales
- 1 x sliding scale for rear-axle alignment medium wheelbase 2500 mm to 3200 mm
- 2 x rotating plates incl. ramps
- 4 x rotating plate locks made of plastic
- 1 x electronic inclinometer
- 2 x hanging scales, rear axle
- 2 x wall bracket
- 1 x steering wheel arrestor
- 1 x splittable track scale
- Multilingual operating instructions
- Axle alignment assistance software*

Optional accessories

- 1 x rear-axle rotating plate (8PZ 015 269-311)
- 4 x aluminium ramps (8PZ 015 269-321)
- 6 x 24" adapters for extending the wheel alignment module measuring shafts when measuring 24" rims (8PZ 015 269-331)

* The monthly charges for updates are not included in the delivery contents

OPTIONAL ACCESSORIES FOR CSC-TOOL SE + CSC-TOOL MOBILE



Protective Cover for CSC-Tool/ CSC-Tool SE

- Premium all-round protection
- Quick and easy mounting
- Repels water, dust and oil

Item no.

8PZ 010 611-381



Reference Panel Storage Box

- Safe housing for up to 10 reference panels for the CSC-Tool Mobile
- Light, compact and robust
- Can be stacked

Item no.

8PZ 010 624-701



Lock Detent Pawl

- The lock detent pawl fixes the cross member of the CSC-Tool Mobile to the base frame
- With this component, the Radar Kit I EVO can be mounted in any position on the cross member of the CSC-Tool Mobile (eg. laterally)
- The Radar Kit I EVO can be fixed in maximum position left or right without risk of the cross member being lifted out of the retaining bolts

Item no.

8PZ 010 624-971



Item no. **8PD 010 611-991**
Front Camera Leveling Aid

Front Camera Leveling Aid

A special adjustment tool is required for the front camera calibration on certain Volvo models. Prior to the dynamic camera calibration, the camera needs to be adjusted with a positioning tool compliant with the specifications of the manufacturer such as the Front Camera Leveling Aid from HELLA GUTMANN SOLUTIONS.

Product characteristics

- Front camera leveling compliant with the specifications of the manufacturer is a basic requirement for calibration
- Easy handling

Basic delivery contents

- Front Camera Leveling Aid



Item no.
8PZ 010 611-211

Tape Measure Holder with Tape Measure (2 pcs.)

- Quick and easy adjustment of distance between CSC-Tool/SE and vehicle
- Exact positioning through moving the cross member
- Tape measure with magnet for easy mounting on wheel alignment module



Item no.
8PZ 015 269-061

Radar Reflector Cone – Mitsubishi

For the calibration of Mitsubishi radar systems.



Item no.
8PZ 015 269-921

Bonnet Target – Hyundai

For the calibration of Hyundai windscreen cameras on certain models.



No compromises with headlight adjustments

Today, more and more vehicles are equipped with complex headlight technology and lighting assistance systems. With these constantly evolving systems, the challenges faced by workshops in testing and adjusting headlights have also increased.

HELLA is a major supplier of headlights of all technology levels, so it makes sense to trust someone within the HELLA family when testing and adjusting these lights. HELLA GUTMANN SOLUTIONS is the optimum choice when it comes to selecting a headlamp aimer.

With tools from the SEG series, workshops can be sure they're in safe hands.



HEADLIGHT AIMING DEVICES

Correctly adjusted headlights are essential for the safety of all road users. Regular light check campaigns show that the headlights of about one in three vehicles are incorrectly adjusted. While some headlights are aimed far too high others are too low

giving the driver restricted vision of the road ahead. This means that a lot of work has yet to be done by workshops to restore road safety.



Item no. **8PA 007 732-401**
SEG V

SEG V – A real eye-catcher

The latest model combines diagnostic expertise and lighting know-how. All functions of the SEG V can be operated easily and intuitively thanks to the 8.4" touch screen. For example, vehicle identification takes place via Car History.

The CMOS camera records the light distribution of the headlights and the data is evaluated. In nearly real time, the light distribution is then depicted on the screen accompanied by the relevant data. With the help of a software similar to that of the mega macs series, vehicle-specific data can already be entered prior to the measurement. Quick tests without the need to enter data are also possible. After the measurement, the recorded data can be transmitted to peripheral devices via the USB or WiFi interface. Thanks to the automatic level compensation, inclinations and unevenness in the floor are compensated in both directions of the setup area of the SEG.



Item no. **8PA 007 732-311**
SEG IV DL

SEG IV – fit for all systems

Thanks to the scaling on the test screen of the SEG IV, you are able to test and precisely adjust all current headlight systems like halogen headlights, xenon headlights, LED headlights and systems with high beam assist (vertical light/dark boundary).



Item no. **8PA 007 732-321**
SEG IV SE

SEG IV SE – looking towards the future

With the SEG IV SE from HELLA GUTMANN, you are able to test and aim any kind of lighting system including the most advanced headlight systems. The large test screen with vertical lines also enables checking and aiming headlights, especially ones with intelligent high beam assistant systems. A longer column increases the working range to max. 1650 mm and thus also allows the adjustment of even high-mounted headlights. The SEG IV SE also includes a hybrid sight. It consists of a powerful line laser and an analog sight. With these practical features, the tool can be aligned orthogonally to the vehicle with maximum precision – even in bright conditions. The combined visor ensures total functionality. Thanks to the reflection angle of 120°, you can also aim at external reference points. This is especially advantageous on vehicles with high-mounted headlights (SUVs, vans, etc.).



HEADLIGHT AIMING



Item no. **8PA 007 732-331**
SEG IV Mercedes-Benz

SEG IV Mercedes-Benz – Especially for Mercedes-Benz Partners

At Mercedes-Benz they like to pay attention to details, especially when the safety of everyone in road traffic is at stake. Incorrectly aimed headlights are a safety risk that drivers want to prevent. To ensure that headlights can be aimed easily and as precisely as possible, Mercedes-Benz has developed its own process which takes into account all factors influencing the driving axis geometry.

The Mercedes-Benz SEG IV can be moved on a leveling rail system equipped with special geometry which has a great torsional strength. The rail system can be leveled horizontally as well as vertically and has no trouble compensating even for major irregularities. The corresponding "zero-tolerance" roller system fits perfectly in the rails and holds the system reliably on the track during testing and adjustment.



| SCOPE OF FUNCTIONS | SEG V | SEG IV DLLX | SEG IV SE |
|---|-------|-------------|-----------|
| Digital luxometer | + | + | + |
| Broadband sight | | + | |
| Hybrid sight | + | | + |
| Deflection mirror | | + | + |
| Fresnel lens | + | + | + |
| Laser positioning aid | | + | + |
| Level gauge/eccentric shaft for angle adjustment | | + | + |
| Rotating column for aligning the optical housing | + | + | + |
| Optional refitting to steel casters on adjustable rails | + | + | + |
| Automatic level compensation | + | | |
| 8.4" touch screen | + | | |
| Vehicle recognition via Car History | + | | |
| Interfaces: USB / WiFi | + | | |
| Asanetwork | + | | |
| Can be updated | + | | |
| Polymer concrete base with rollers | + | + | + |
| Extended column, adjustment range up to 1650mm | | | + |

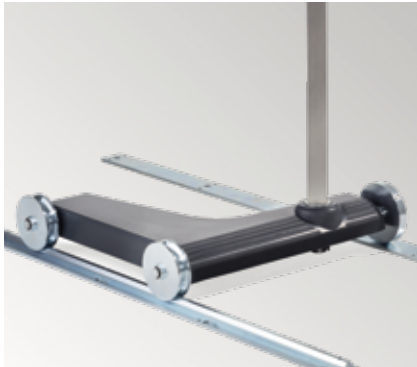
* Lux values are indicated in the measurements menu

** Laser sight

*** Laser sight consisting of powerful laser and analogue sight

**** Stainless steel column

RAIL SYSTEMS



Adjustable SEG Rail System

The adjustable rail system is a clever alternative to refitting your workshop. The rail system is quickly mounted and readjusted if needed. With its long service life and attractive price it puts you in a strong position. The basic set consists of 4 rails with a length of 1500 mm each and high-quality steel castors for the headlight aiming devices SEG IV and SEG V. The excellent stability of the set guarantees best results when measuring and adjusting headlights.

Item no. **9XS 861 736-021**
Rail system

Item no. **9XS 862 004-021**
Caster set

Item no. **9XS 861 736-041**
Extension set 1500 mm

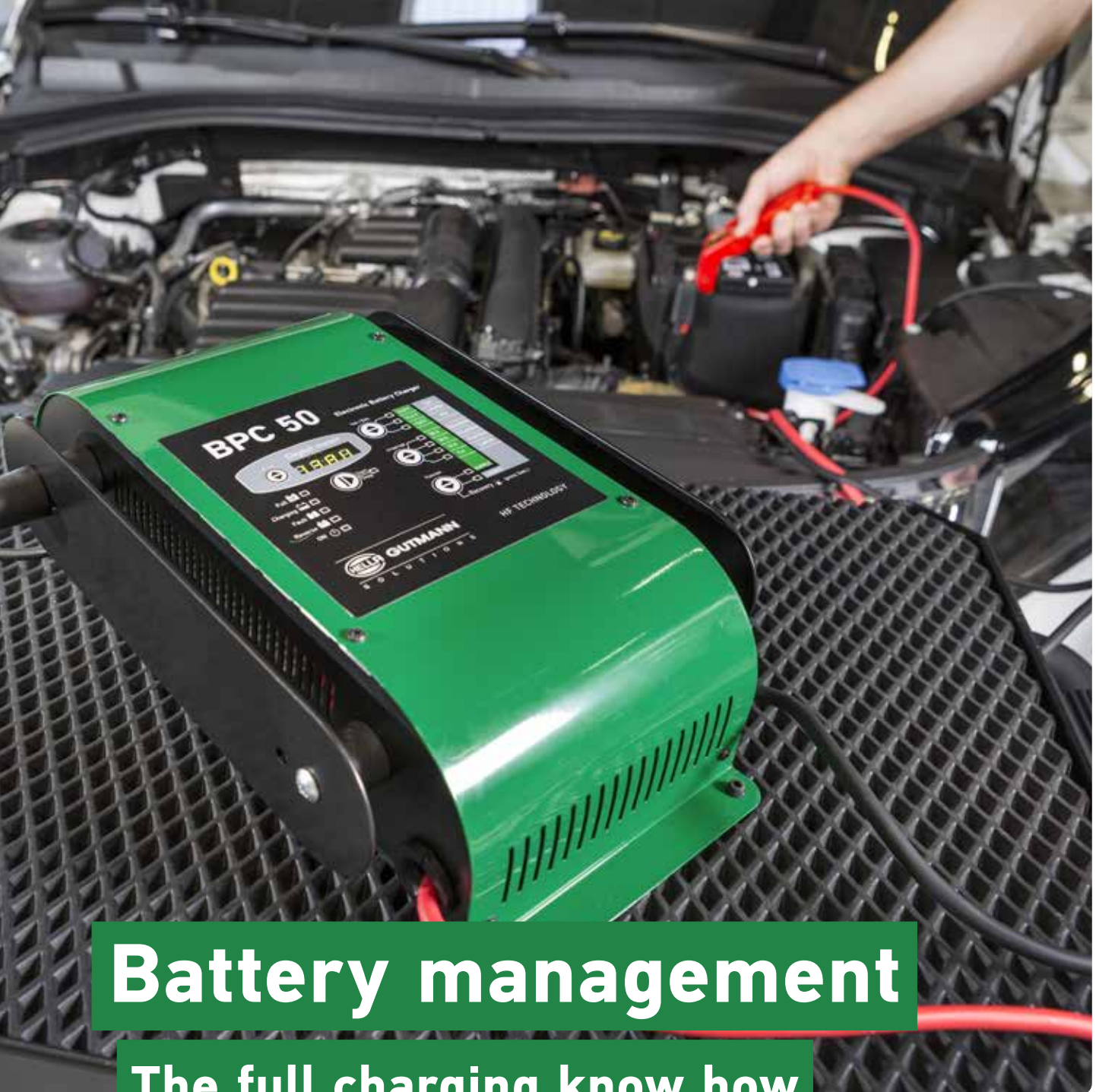
Advantages at a glance

- Adjustable rail system
- Quick mounting
- Height adjustment is possible horizontally and vertically
- Unevenness of as much as 20 mm can be compensated
- For precise measurements and adjustments
- Readjustments possible at any time
- Designed specifically for the corresponding rail
- High-quality, heavy steel caster set for a higher tilt stability
- Solid construction
- Long service life
- Attractive price
- Optionally extendable
- ...and much more.

What's included – SEG Rail System, individual levelling

Height-adjustable SEG aftermarket rail system consists of:

- 4 x 1500 mm rails (2 hexagonal rails, 2 pieces of flat steel)
- 30 hexagon-socket countersunk head screws with flange M6
- 30 Fischer dowels M8 S
- 80 setscrews (40 pieces short 10 mm, 40 pieces long 25 mm)
- 20 shims
- 2 rubber stops
- 2 x track casters
- 1 x caster
- Assembly instructions



Battery management

The full charging know how

Battery defects are the most common cause for vehicle breakdowns on our roads today. It is therefore crucial that batteries are checked regularly in order to prevent sudden failure.

Because the electronics in modern vehicles have become more and more complex and power consumption has risen due to a growing number of power consumers, the demand on battery performance and charging devices has also increased.



Item no.
8ES 530 301-917

PRO 25S

- High frequency battery charger (12 V, 25 A)
- For gel, wet cell, AGM and LiFePO4 batteries
- Charging, recovery and supply function
- Microprocessor-controlled charging curve
- Steady charging without voltage peaks for flashing control devices
- With protection against polarity reversal, short circuit, voltage error and overcharging
- With professional brass clamps

TECHNICAL DATA

| | |
|--------------------------|---|
| Battery types | Gel, wet cell, AGM, LiFePO4, EFB, Ca/Ca, MF & EFB |
| Charging characteristics | 8-stage |
| Amperage | 25 A |
| Voltage | 12 v |
| Max. charging voltage | 15.8 v Lead Acid battery types, 14.4v LiFePO4 |
| Battery capacity | 40 - 500 Ah Lead Acid battery types |
| Battery capacity | 30 - 450 Ah LiFePO4 |
| IP code | IP 44 |
| Terminal cable length | 2.0 m |



Item no.
8ES 004 417-291

BPC 50

- High frequency battery charger (12 V, 50 A)
- For gel, wet cell, AGM and LiFePO4 batteries
- Charging, recovery and supply function
- Microprocessor-controlled charging curve
- Steady charging without voltage peaks for flashing control devices
- With protection against polarity reversal, short circuit, voltage error and overcharging
- With professional brass clamps

TECHNICAL DATA

| | |
|---------------------------|--------------------------------|
| Battery modes | AGM, LiFePO4, wet cell |
| Amperage (min – max) | 5 to 50 A |
| Voltage | 12 V |
| Battery capacity | 5 to 500 Ah |
| Trickle charging capacity | 5 to 1500 Ah |
| IP code | IP 20 |
| Protection class | Protection class 1 |
| Terminal cable length | 2.7 m |
| Dimensions | 375 x 330 x 100 mm (L x W x H) |



Item no.
8ES 004 417-301

BPC 120

- High frequency battery charger (12 V, 120 A)
- For gel, wet cell, AGM and LiFePO4 batteries
- Charging, recovery and supply function
- Microprocessor-controlled charging curve
- Steady charging without voltage peaks for flashing control devices
- With protection against polarity reversal, short circuit, voltage error and overcharging
- With professional brass clamps

TECHNICAL DATA

| | |
|---------------------------|--|
| Battery modes | AGM, LiFePO4, wet cell |
| Amperage (min – max) | 10 to 120 A |
| Voltage | 12 V |
| Battery capacity | 5 to 1200 Ah |
| Trickle charging capacity | 5 to 3600 Ah |
| IP code | IP 20 |
| Protection class | Protection class 1 |
| Terminal cable length | 2.7 m |
| Dimensions | 460 x 420 x 170 mm (L x W x H mounted) |



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