HELLA GUTMANN SOLUTIONS

Workshop tools and data

for fast, accurate fault diagnosis and ADAS calibration

THE WORKSHOP'S FRIEND

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The complete workshop solution for fast and accurate fault diagnosis and ADAS calibration

Recognising that the rapid growth of electronic vehicle systems would have major implications for independent workshops, over a decade ago global automotive technology leader HELLA joined forces with Europe's leading diagnostic specialist Gutmann Messetechnik. The result was HELLA GUTMANN SOLUTIONS, a powerful partnership.

Today, HELLA GUTMANN SOLUTIONS is trusted by more than 45,000 workshops worldwide, as well as Europe's largest breakdown recovery company, the ADAC, and some of the leading brands in the glass replacement sector.

As a driving force in next generation vehicle electronics, HELLA's vast OEM knowledge and experience enables HELLA GUTMANN SOLUTIONS to lead the way in on-board vehicle diagnostic technology and Advanced Driver Assist Systems (ADAS) calibration equipment, and first to market with new tools and software.

Diagnostic tools and data solutions:

Exceptional vehicle coverage. Outstanding value.

With the capability to repair more than 40,000 individual vehicle models and counting, combined with state-of-the-art features, such as *PassThru*® and *Repair Plus*, the mega macs range of diagnostic tools and HGS Data provides a complete fault-finding and repair solution.

Choosing mega macs makes good financial sense by improving workshop productivity and overcoming the need to invest in multiple diagnostic tools for comprehensive coverage of popular vehicle brands.

ADAS calibration equipment:

Calibrate camera and radar-based driver aids with total accuracy

Advanced Driver Assist Systems (ADAS) such as Autonomous Emergency Braking, radar-guided cruise control and lane departure warning are now a common feature of many new vehicle models.

The cameras and radar sensors used by these complex electronic systems require precise and accurate calibration after many common maintenance tasks including wheel alignment and axle geometry changes, as well as windscreen replacement and accident damage repair.

The CSC-Tool and its expansion kits enable workshops to accurately calibrate the camera and radar-based ADAS used by over 32 vehicle brands.

Always **at your service**

Diagnostic tools and data are just the beginning with HELLA GUTMANN SOLUTIONS.

Our cutting-edge products and software set new standards, and our commitment to technical support is equally impressive.

In addition to comprehensive product familiarisation and training, workshops that choose HELLA GUTMANN SOLUTIONS benefit from a high level of technical assistance.

From basic tasks and trouble-shooting, to help with interpreting data or information on spare parts, our technical support team is just a phone call away.

Our Australian technical team is backed by 90+ qualified experts at our global HQ

Real-time repair **concept**

Our '*real-time repair*' concept ensures that even the most complex repairs can be completed with ease, optimising workshop time and maximising productivity.

Using the '*Repair Plus*' feature, workshops equipped with the mega macs 56 or mega macs 77 diagnostic tools can connect directly to the huge HELLA GUTMANN SOLUTIONS technical database, which enables the device to propose the appropriate repair from the vehicle's trouble codes and symptoms.

Customer support from HELLA GUTMANN SOLUTIONS

- Comprehensive product training programme
- Dedicated technical support team
- '*Repair Plus*' enabled devices can identify faults from symptoms and fault codes, request help from the technical team and upload vehicle data for analysis
- Technical helpline for assistance with:
  - Product and software support
  - Fault-finding and trouble-shooting
  - Interpreting vehicle data
  - Information on spare parts

Diagnostic tools and data

The perfect diagnostic solution **for every workshop**

When it comes to fault-finding and repair, whatever your workshop requirements the mega macs range of diagnostic tools has it covered.

From the state-of-the-art mega macs 77 to the mega macs PC, which enables any Windows® PC, laptop or tablet to be turned into a powerful diagnostic device, one thing is standard: a powerful database of vehicle data for more than 40,000 individual models and counting.

Each device is also *PassThru*® equipped, enabling the latest ECU firmware updates to be downloaded directly from the vehicle manufacturers' websites; fault codes to be read and deleted from the vehicle memory; a global check of all systems carried out; coding and corrections made to the basic settings; service indicators reset, and all relevant parameters saved in Car History.

State-of-the-art features

New, advanced features make accurate fault diagnosis quicker and easier than ever.

Repair Plus enabled devices give the technician a helping hand by displaying the most appropriate repair solutions based on the vehicle's trouble codes and symptoms.

Similarly, *Guided Measuring Technology* (GMT), available for the first time on the mega macs 77, overcomes the need for specialist oscilloscope knowledge by guiding the user through the process of measuring component values, step-by-step.

Built to last

All the mega macs devices are engineered to withstand the rigours of workshop life and supported software updates allow new features and vehicle data to be installed, making mega macs devices a great economical, technical and commercial choice.

The mega macs range at a glance

Key features and functions	mega macs PC	mega macs 42 SE	mega macs 56	mega macs 77
Display	N/A	3.5" LCD TFT Colour display Membrane keypad	10.4" display 1024 x 768 pixels Capacitive touch screen	15.6" wide screen 1920 x 1080 pixels Capacitive screen LED backlight
Diagnostic functions ▪ Reading + deleting trouble codes ▪ Basic setting ▪ Actuator test ▪ Coding	●	●	●	●
Service reset	●	●	●	●
Parameters (can be graphically displayed)	8	4	12	16
Repair Plus features				
Trouble code-based solutions			●	●
Symptom-based solutions			●	●
Interactive wiring diagrams				●
Component test values	●	●	●	●
Component location	●	●	●	●
Timing belt data	●	●	●	●
Exhaust emission data	●	●	●	●
Wiring diagrams	●	●	●	●
Cabin air filter	●	●	●	●
Fuses / relays	●	●	●	●
Flat rate units	●	●	●	●
Service data	●	●	●	●
Parts information				●
Guided measurements				●
PIN data* (extended guided measurements)				●
Pressure measurement**				●
Battery management				●
Repair instructions				●
Diesel information				●

● Included as standard with initial active licence

* Only in connection with the MT77 module. ** Only in connection with the MT77 module and LPD-Kit.

HGS Data

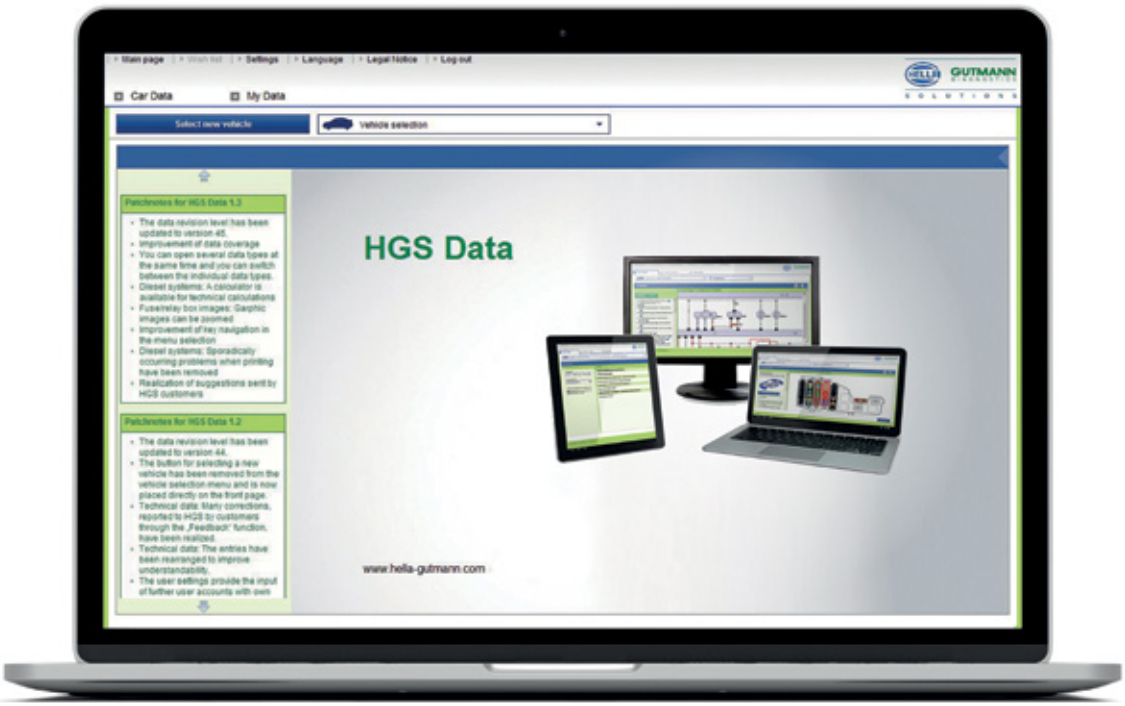
The complete vehicle technical database, accessible through any internet-enabled PC, with information and repair solutions for over 40,000 vehicles.

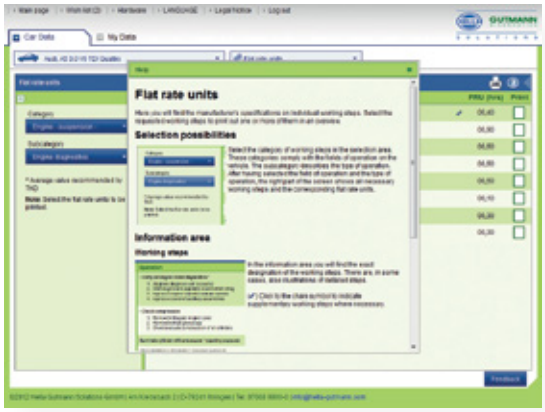
With HGS Data you have access to a wealth of technical information designed to assist you with your day-to-day service and repair jobs from any internet-enabled PC, all at the touch of a button.

Technical specifications for over 40,000 vehicle models, as well as maintenance plans, engine control, ABS, airbag and thermal management data, updated repair aids and wiring diagrams are all covered.

- > Technical data for over 40,000 vehicles
- > Circuit diagrams
- > Airbag, thermal management and engine control data

* ***FREE 30 day trial!*** *Simply email hgscustomersupport@hella.com to request yours*





Key features

Technical data from over 40,000 vehicles	Service resets
Access to exclusive HELLA training literature	Repair times
Airbag data	Clear, fast presentation
Circuit diagrams, many colour coded	Component locations
Thermal management	Lubricants and capacities
Engine control	Service schedules
ECU pinout data	Fuses and relays
Diagnostic database	Full access, fixed price

mega macs 77

Featuring an impressive 15.6” full HD touchscreen that allows up to 16 vehicle parameters to be viewed at any one time and a powerful 1.7GHz quad-core processor, the range-topping mega macs 77 sets new standards in diagnostic technology.

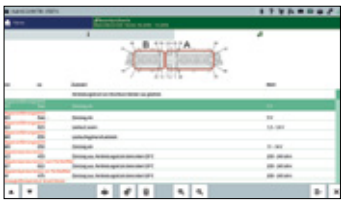
Guided Measuring Technology (GMT)

The mega macs 77 is the first device in the mega macs series to feature Guided Measuring Technology (GMT).

When used in conjunction with the MT77 measurement technology module, the mega macs 77 provides a step-by-step guide through the measurement procedure, with detailed notes and instructions displayed on the device’s screen. Component test values can be quickly, easily and accurately measured - and analysed against target values - without the need for specialist knowledge or training in using an oscilloscope.

Repair Plus

The mega macs 77 also offers full access to our real-time repair concept, *Repair Plus* – a powerful system that provides direct access to the HELLA GUTMANN SOLUTIONS technical database, allowing vehicle data and detailed repair instructions to be downloaded to the device.



Guided measuring technology from HELLA GUTMANN SOLUTIONS brings all the required values and assistance directly onto the screen.

Key features

> 15.6" full HD (1920 x 1080 pixels) touchscreen display
> Mobile workstation with touchscreen monitor
> Powerful 1.7GHz quad-core processor for faster fault-finding and repair
> Guided Measuring Technology (GMT) with optional MT77 measuring technology module
> ADAS software included
> Full access to *Repair Plus**

*

THINKING AHEAD
mega macs 77 provides you with the first ever opportunity to try out guided measuring technology, which could even be operated smoothly by a trainee.

Key functions

Actuator tests
Reading and deleting fault codes of all ECUs
Clear vehicle identification through VIN
Fault code explanation with detailed information, including symptoms and possible causes on screen
Graphical parameter depiction and explanations
Vehicle diagnostic socket location on screen
Indication of the diagnostic connection and adapter designation
Images of engine compartments and interior with component location
Codings
Basic settings and adaptions including Xenon lights, steering angle sensors, electronic park brake
Service resetting including variable servicing schedules, brake pad/fluid
DPF regeneration, additive and filter reset (i.e. BMW CBS etc.)
Print function for all measurement results
Car History for saving the complete car service life
PassThru® ready

Technical specification

Display	15.6" (1920 x 1080 pixel) full HD capacitive touchscreen, LED backlight
Processor	Quad-core CPU, 1.7 GHz
RAM	2 GB LPDDR2, 533 MHz
Storage	32 GB eMMC
Interfaces	2 x USB 2.0 host port (type A); 1 x USB 2.0 device port (type B)
Wireless interfaces	Wi-Fi®, Bluetooth®
Average battery life	Up to 4 hours runtime
Dimensions (HxWxD)	131 mm x 421 mm x 314 mm
Weight	3,800g including battery

What's included

- Battery
- DT-VCI (wireless communication module)
- Docking station
- USB cables (device & host)
- Power supply and power cable

Optional accessories

- MT77 measurement technology module
- Mobile workstation with touchscreen monitor
- Device case for mega macs 77

* Available with the HELLA GUTMANN SOLUTIONS Repair Plus service package

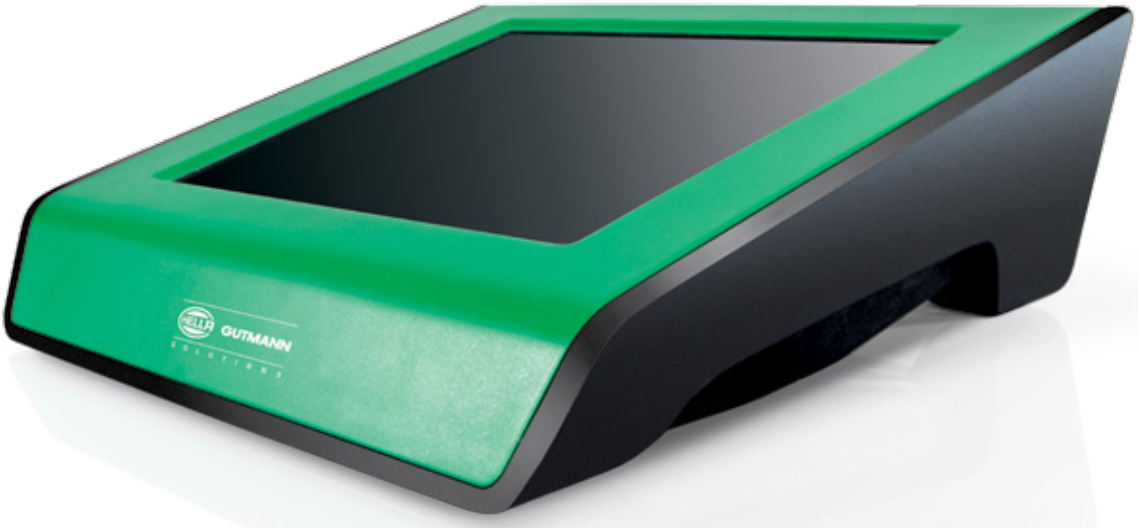
mega macs 56

An advanced and highly portable diagnostic tool with Wi-Fi and Bluetooth® VCI connectivity, and a 10.4" high resolution screen.

The mega macs 56 is not only extremely compact, but also agile and efficient when it comes to vehicle communication and interpreting fault codes.

It's *PassThru*® ready, has onboard data for more than 40,000 vehicle models and has a large 10.4" high resolution screen. An optional 'measurements package', comprising of a 2 channel oscilloscope and multimeter, further extends its capability*.

For the first time on a mid-range device, the mega macs 56 also features access to *Repair Plus*** – a powerful system that provides instant access to a wealth of vehicle data, repair instructions and expert technical advice.



Key features

> 10.4" high resolution display
> 2 channel oscilloscope* and multimeter with graphical display
> ADAS software included
> Access to *Repair Plus***

* Available as an optional accessory
** Available with the HELLA GUTMANN SOLUTIONS Repair Plus service package

Key functions

Actuator tests
Reading and deleting fault codes of all ECUs
Clear vehicle identification through VIN
Fault code explanation with detailed information, including symptoms and possible causes on screen
Graphical parameter depiction and explanations
Vehicle diagnostic socket location on screen
Indication of the diagnostic connection and adapter designation
Codings
Basic settings and adaptions including Xenon lights, steering angle sensors, electronic park brake
Service resetting including variable servicing schedules, brake pad/fluid
DPF regeneration, additive and filter reset (BMW CBS etc.)
Print function for all measurement results
Car History for saving the complete car service life
PassThru® ready

Technical specification

Display	10.4" (1024 x 768 pixel) capacitive touchscreen, LED backlight
Processor	800 Mhz ARM-CPU
RAM	512 MB SDRAM
Interfaces	USB (device & host), 1x slot for multimeter module, 1x reserve slot
Wireless interfaces	Wi-Fi®, Bluetooth®
Average battery life	Up to 5 hours runtime
Dimensions (HxWxD)	100 mm x 310 mm x 265 mm
Weight	2,200g including battery

What's included

- Battery
- Docking station
- DT-VCI (wireless communication module)
- Bluetooth® adapter
- USB cables (device & host)
- Power supply and power cable

Optional accessories

- MT56 measurement technology module
- Device case for mega macs 56

mega macs 42 SE

A compact, lightweight handheld diagnostic tool with comprehensive vehicle coverage and packed with features usually only found on much larger devices.

Despite its diminutive size, which makes it highly portable, the mega macs 42 SE is no lightweight when it comes to features.

The mega macs 42 SE is *PassThru*® compatible, enabling the latest ECU firmware to be downloaded directly from the vehicle manufacturers' websites, and has long range wireless and Bluetooth® connectivity.

These features, combined with ECU and system data for more than 40,000 vehicle models, make the mega macs 42 SE a highly capable professional workshop tool.

Key features

> Compact and lightweight diagnostic tool
> Comprehensive in-depth vehicle coverage
> ADAS software included
> Equipped with *PassThru*® technology
> Comes complete with Bluetooth® adapter for remote printing and a docking/charging cradle

Key functions

Actuator tests
Reading and deleting fault codes of all ECUs
Clear vehicle identification through VIN
Fault code explanation with detailed information
Graphical parameter depiction and explanations
Indication of the diagnostic connection and adapter designation
Codings
Basic settings
Service resets
Print function for all measurement results
PassThru® ready

Technical specification

Display	3.5" LCD colour TFT
Storage	32 GB eMMC
Interfaces	USB (device & host)
Wireless interfaces	Wi-Fi®, Bluetooth®
Average battery life	Up to 4 hours runtime
Dimensions (HxWxD)	47 x 110 x 202 mm
Weight	480g including battery

What's included

- Battery
- Docking station
- DT-VCI (wireless communication module)
- Bluetooth® adapter
- USB cables (device & host)
- Power supply and power cable

Optional accessories

- Device case for mega macs 42 SE

mega macs PC

The mega macs PC turns any Windows® PC into a powerful diagnostic device with the same capabilities as the popular mega macs 42 SE.

In conjunction with your Windows® PC or tablet, the mega macs PC is a flexible, highly portable and user-friendly all-round diagnostic solution for professional workshops, packed with features including *Pass Thru*® technology and complete with detailed ECU and system data for over 40,000 vehicle models.

> PC version of the popular mega macs 42 SE model
> Suitable for your Windows® PC or Tablet
> Comprehensive in-depth vehicle coverage
> Equipped with *PassThru*® technology
> ADAS software included

Key features and functions

PassThru® technology	Indication of the diagnostic connection type and location
Wireless VCI completes the connection to the vehicle	Actuator tests
Reading and deleting fault codes of all ECUs	Codings
Global Scan and result storage	Basic settings and adaptions
Clear vehicle identification through VIN	Service resets including CBS, Longlife and DPF
Fault code explanation with detailed possible causes	Print function for all measurement results
8 channel graphical parameter depiction and explanations	Parameter recording function

CSC-Tool

The first multi-brand ADAS calibration solution – and still widely-regarded as the best – the CSC-Tool enables fast and extremely accurate calibration of Advanced Driver Assist Systems.

Accurate calibration, assured

The safety-critical nature of ADAS means that accuracy is essential when it comes to calibrating the highly sensitive cameras and radar sensors.

With the CSC-Tool, precision accuracy is achieved using lasers which mount to the vehicle's rear axle, ensuring absolute alignment of the vehicle's camera or radar sensor with the CSC-Tool's calibration panel.

Fully compatible with the mega macs series of diagnostic tools, calibration results can be recorded and saved in the device's Car History function, and a report can be printed as a permanent record that calibration has been carried out.

User-friendly and flexible

The CSC-Tool provides reliable results even in workshops without a completely level surface and it's a modular system, with a number of expansion kits that extend the CSC-Tool's capability to meet a range of workshop requirements:

- Radar kits enable workshops to calibrate a variety of radar systems, extending the CSC-Tool's capability beyond camera-based ADAS
- A side and rear expansion kit allows rear-view and 360° camera systems to be accurately calibrated
- A growing range of additional calibration targets currently extend the CSC-Tool's capability to over 32 vehicle brands.

GOLD
AUSTRALIAN AUTO AFTERMARKET AWARDS

WINNER
CSC-Tool
Most Innovative New Servicing Product (Tools and Equipment)

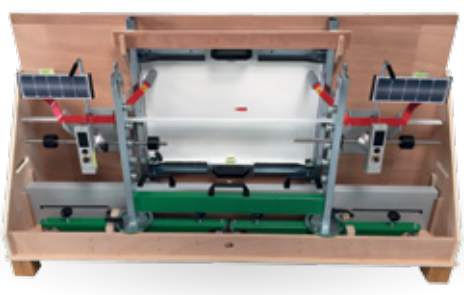
CSC-Tool Mobile

The CSC-Tool Mobile is a compact and transportable ADAS calibration solution ideal for mobile use or for workshops with restricted space.

It's designed and engineered to match the unfailing accuracy of the conventional CSC-Tool and, just as its big brother, the vehicle's rear axle is used to ensure absolute alignment of the camera or radar sensor with the calibration target.

The CSC-Tool Mobile is ultra portable and designed to be assembled in minutes, with retractable scale mirrors to keep cross beam length to a minimum, fold flat legs and a fast adjustment beam system.

All modular extensions from the full-size CSC-Tool can also be utilised with the CSC-Tool Mobile and the vehicle-specific calibration targets have been redesigned to allow them to be folded, for easy storage and transportation.



Supplied with compact custom storage case.

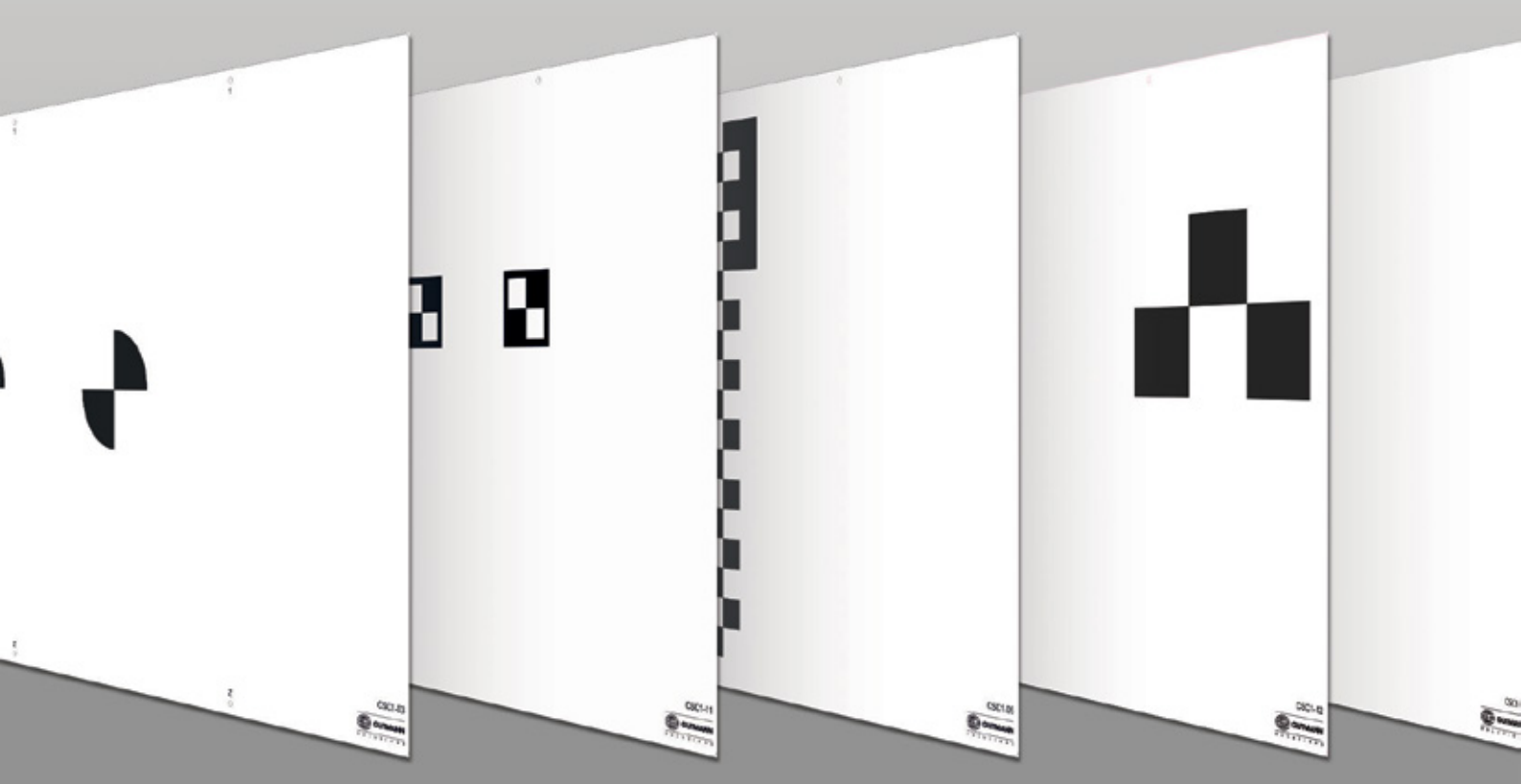
CSC-Tool Calibration Targets

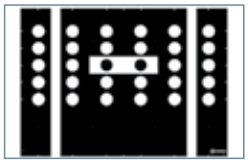
A range of additional calibration targets are available which dramatically extend the CSC-Tool's vehicle coverage.

Additional calibration targets enable static calibration for models from 32 manufacturers and counting, including Fiat, Honda, Hyundai, Jeep, Kia, Lexus, Mazda, Mercedes-Benz, Nissan, Renault, Subaru, Toyota and Volkswagen Audi Group (VAG), in addition to Dynamic Calibration on the mega macs device for models from BMW, Porsche, Ford, GM, Mitsubishi and Volvo.

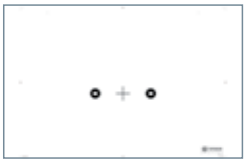
New calibration targets are continually being developed and introduced – for the latest updates visit **hella.com.au**

* *All calibration targets are based on OEM specifications, glare resistant and highly durable.*





VAG-Group
(included with CSC-Tool)
8PZ 010 624-011 (M-01)



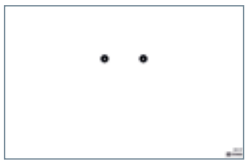
Mercedes-Benz
8PZ 010 601-901 (1-02)
8PZ 010 624-021 (M-02)

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

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

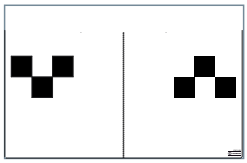
KIA/Hyundai
8PZ 010 607-971 (1-05)
8PZ 010 624-051 (M-05)

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

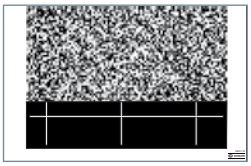


Mazda
8PZ 010 607-991 (1-07)
8PZ 010 624-071 (M-07)

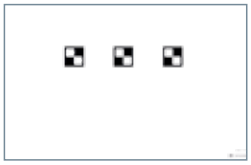
Toyota/Lexus
8PZ 010 611-181 (1-08)
8PZ 010 624-081 (M-08)



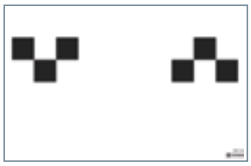
Honda
8PZ 010 611-451 (1-09)
8PZ 010 624-091 (M-09)



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
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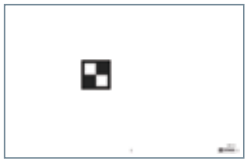
8PZ 010 624-121 (M-12)



Toyota/Lexus
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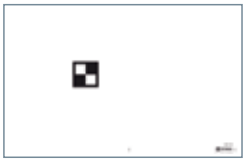
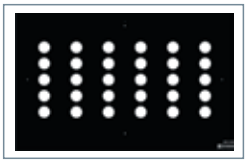
8PZ 010 624-131 (M-13)



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
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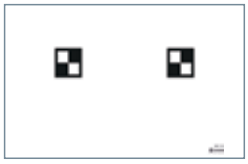
8PZ 010 624-161 (M-16)



Mitsubishi
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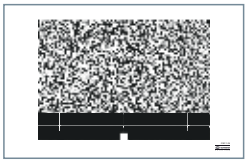
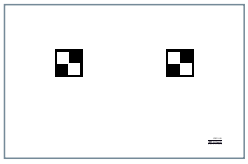
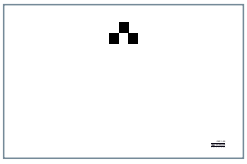


Suzuki
8PZ 010 611-911 (1-18)
8PZ 010 624-181 (M-18)

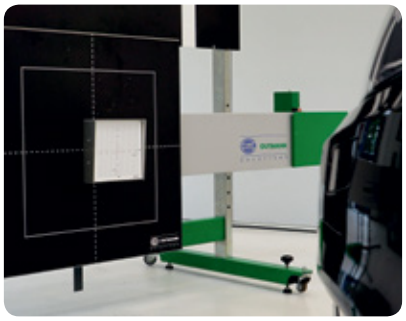


Suzuki
8PZ 010 611-921 (1-19)
8PZ 010 624-191 (M-19)



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

CSC-Radar Kit I & II

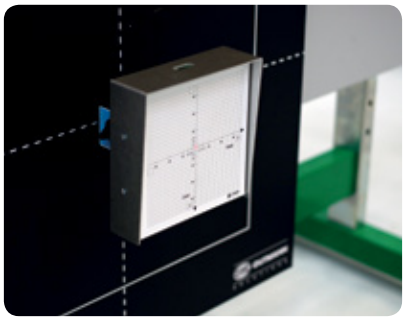


Everything on your radar

Two easy to use radar kits are available for the CSC-Tool for accurately calibrating radar systems including the highly sensitive radar sensors for distance regulation and emergency brake assist.

Today, calibrating the radar system in connection with certain tasks done on the vehicle is often mandatory. 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.

The CSC-Radar Kit I, for example, covers the radar systems of the entire VAG Group, BMW, Nissan, Alfa Romeo, Jeep and Porsche. The CSC-Radar Kit II is capable of adjusting radar sensors of Mercedes-Benz.



CSC-Radar Kit I (for radar sensors with mirror system)

This CSC-Radar Kit includes an angular adjustment plate and a magnet laser which are attached to the CSC-Tool.

What's included

- Angular adjustment plate
- Magnet laser
- Case for magnet laser

CSC-Radar Kit II (for radar sensors without mirror system, CSC-Radar Kit I required)

This CSC-Radar Kit includes a mirror adjustment device with vacuum bell.

What's included

- Mirror adjustment device with vacuum bell
- Centring ring for vehicles from 2004
- Centring ring for E-Class
- Hand vacuum pump
- Adjustment tool
- Petroleum jelly
- Case

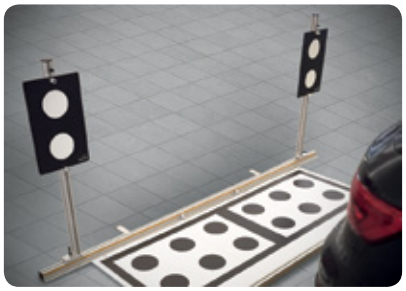
CSC-Kit Rear Cam I + II

New perspectives all round

In combination with the mega macs software, the CSC-Kits Rear Cam I+II provides precise calibration* of 360° and reverse parking camera systems used by Audi, Mercedes-Benz, Seat, Skoda and VW.

These cameras must also be aligned exactly to the vehicle's thrust line (rear axle) according to the manufacturer's specifications.

The new kits are used only as an accessory to the basic CSC-Tool and include a multipiece reference panel system in frame structure (CSC-Kit Rear Cam I – Basic + Addition) and two roll-out optical reference targets (CSC-Kit Rear Cam II – Side).



What's included

Basic

- 2x base support frame interconnecting (Basic)
- 2x slide for measuring tape
- 2x measuring tape
- 2x mounting bolt for reference target
- 2x stabilisation plate
- VAG-Group reference target
- Mercedes-Benz reference target

Addition

- 2x mounting post for reference target
- 4x mounting bolt for reference target
- 2x VAG reference target
- 2x reference target mounting set

Side

- 2x VAG reference target mat
- 4x mounting frame

*CSC-Kit Rear Cam I & II can only be used in connection with a CSC-Tool and a diagnostic device from HELLA GUTMANN SOLUTIONS.

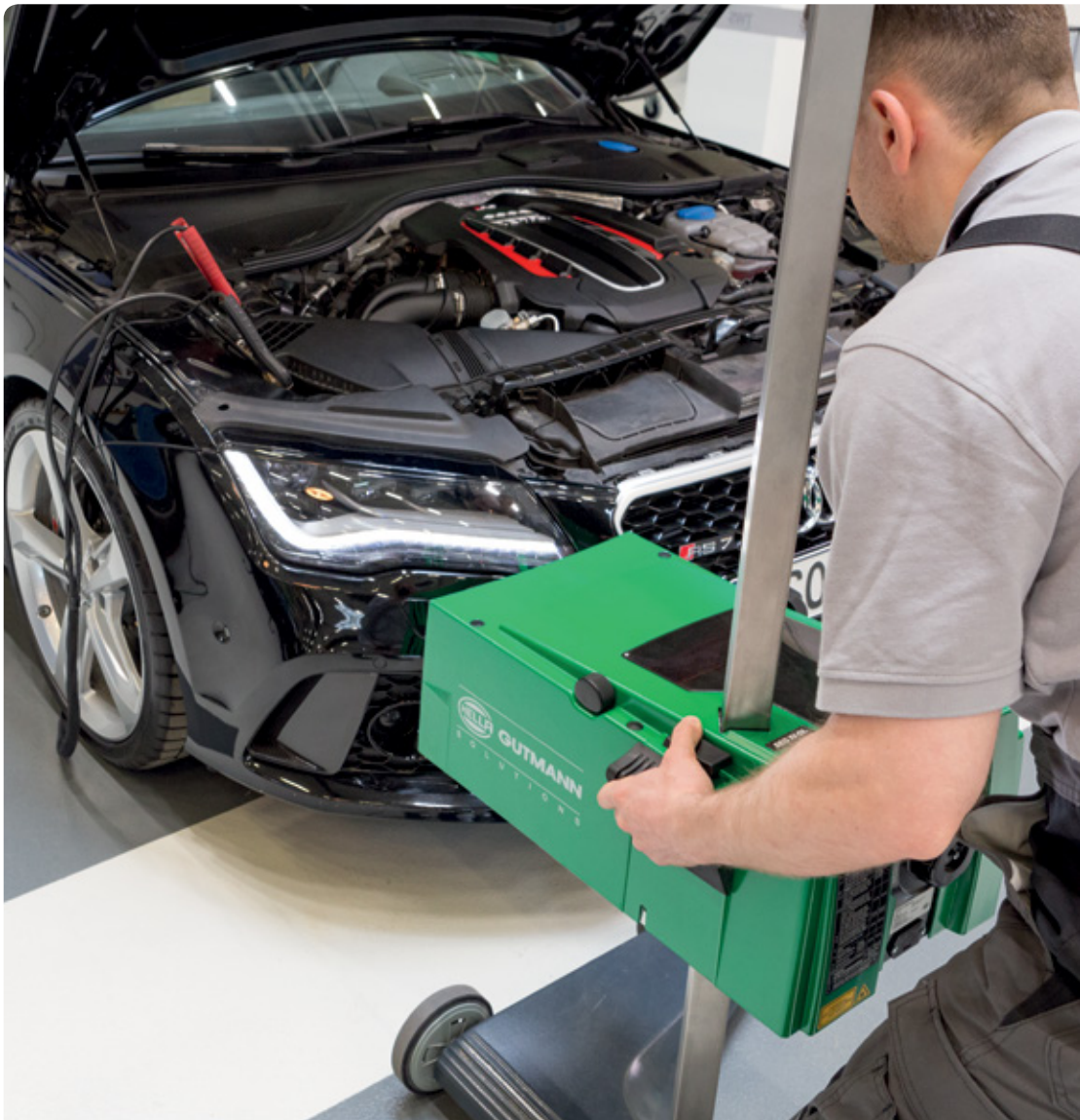
The SEG Series

Precisely adjusted headlights are a prerequisite for road safety. But, let's be honest, wherever you look you are either dazzled by badly adjusted headlights or you see others who seem to cruise around blindly. In short: There is enough work to keep workshops busy. Consequently, there is potential for extra revenues.

With the SEG series, HELLA GUTMANN SOLUTIONS provides workshops with high-performance, professional headlight aiming devices of the new generation.

Depending on the SEG equipment version, you can measure and adjust even the most advanced headlight systems quickly and without fuss. However, because workshops do not necessarily want or need the maximum service scope available for headlight aiming devices, the tools of the SEG series come in different versions, enabling you to choose the right tool for your workshop.

Always prepared. The headlight aiming devices of the SEG series are operational in no time for the precise adjustment of all modern headlight systems.



Key features and functions	**SEG V**	**SEG IV-DLLX**	**SEG IV-DL**	**SEG IV-SE**	**SEG Economy**
Digital luxometer	●	●	●	●	●
Broadband sight		●*	●		●
Hybrid sight	●**			●**	
Deflecting mirror		●	●	●	
Fresnel lens	●	●	●	●	●
Laser positioning aid		●	●	●	
Spirit level/eccentric shaft for angle adjustment		●		●	
Rotating column for directing the optical housing	●***	●	●		●***
Optional conversion to steel caster wheels on height-adjustable rails	●	●	●	●	
Automatic levelling	●				
8.4" touchscreen	●				
Vehicle recognition via Car History	●				
USB interface	●				
WLAN in preparation	●				
Update-enabled	●				
Polymer concrete caster wheel base	●	●	●	●	
Extended column, adjustable to 1,650 mm				●	

* Laser sight ** Sight with powerful laser and analogue sight direction *** The column is made from stainless steel

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