

**#FAHRZEUG
VERSTEHER**



**CALIBRATION OF ADVANCED
DRIVER ASSISTANCE SYSTEMS:
It's all a matter of the right perspective**

CONTENT

WOW! ecosystem

Page 4

Good reasons for the WOW! ACS cars calibration system

Page 6

Safety is not optional

Page 8

Calibration system WOW! ACS cars

Page 10

Double-sided printed calibration board

Page 12

Matching accessories

Page 13

The right calibration procedure

Page 14

Tips & tricks

Page 16

Vehicle diagnostics WOW! DIALOOQ

Page 18

Electro mobility with WOW!

Page 20

More WOW! moments

Page 21



Further information is available at
www.wow-portal.com/acs_cars_en



SAFETY IS NOT OPTIONAL!

**Correct calibration requires a modern diagnostic system
in order to work as intended.**

**Automotive workshops can potentially be held liable if a calibration is not
performed or is performed incorrectly, or if no evidence is provided.**

THE MODULAR WOW! CALIBRATION SYSTEM

**for testing and adjusting driver assistance systems
is 100 % manufacturer compliant and provides your workshop with
additional performance boost in the demanding daily workshop routine.**

WOW! ECOSYSTEM

Diagnostic accessories and services



Vehicle calibration



A/C service



Diagnostics

Multi-brand vehicle diagnostics is the heart of the WOW! ecosystem

Exhaust emissions testing



The product selection may vary depending on the country.

The correct adjustment with WOW! ACS cars

GOOD REASONS FOR THE WOW! ACS CARS CALIBRATION SYSTEM

Everything from a single source

Together with our DIALOOQ diagnostic hardware and software solutions, with WOW! ACS cars we offer you the optimal solution for your demanding daily workshop routine.



WOW! ACS cars – For all relevant vehicle brands

With WOW! ACS cars, we offer you a robust and workshop-compatible calibration system with which you can calibrate all relevant vehicle brands, agile and easy.



Cross-manufacturer approach

We provide you with a 100 % manufacturer compliant calibration system that is put together for you, taking into account the original manufacturer's specifications.



One-person operation

The simple operation of the WOW! ACS cars calibration system enables you to work effectively and time-efficiently.



Your comprehensive and professional service

From delivery to on-site installation and service after commissioning. You have a direct contact person and we are there for you in any situation.





AN INVESTMENT THAT PAYS OFF!
Your personal WOW! benefit

For a calibration after replacing the windshield on an Audi A3. Time required for calibration is 1 hour, according to the manufacturer.

<i>Calibration in your own workshop</i>	
Workshop turnover for a performed calibration.	+ 150.00 €
Manpower (technician) for a work time of 15 - 20 minutes.	- 20.00 €
WOW! ACS cars with target boards/target mats*	- 40.00 €
Result with ACS cars	+ 90.00 €

<i>Calibration in an external workshop</i>	
Workshop turnover for a performed calibration	+ 150.00 €
Manpower for delivering and collecting the vehicle (ca. 1 hour)	- 50.00 €
Calibration costs in someone else's workshop	- 135.00 €
Result	- 35.00 €

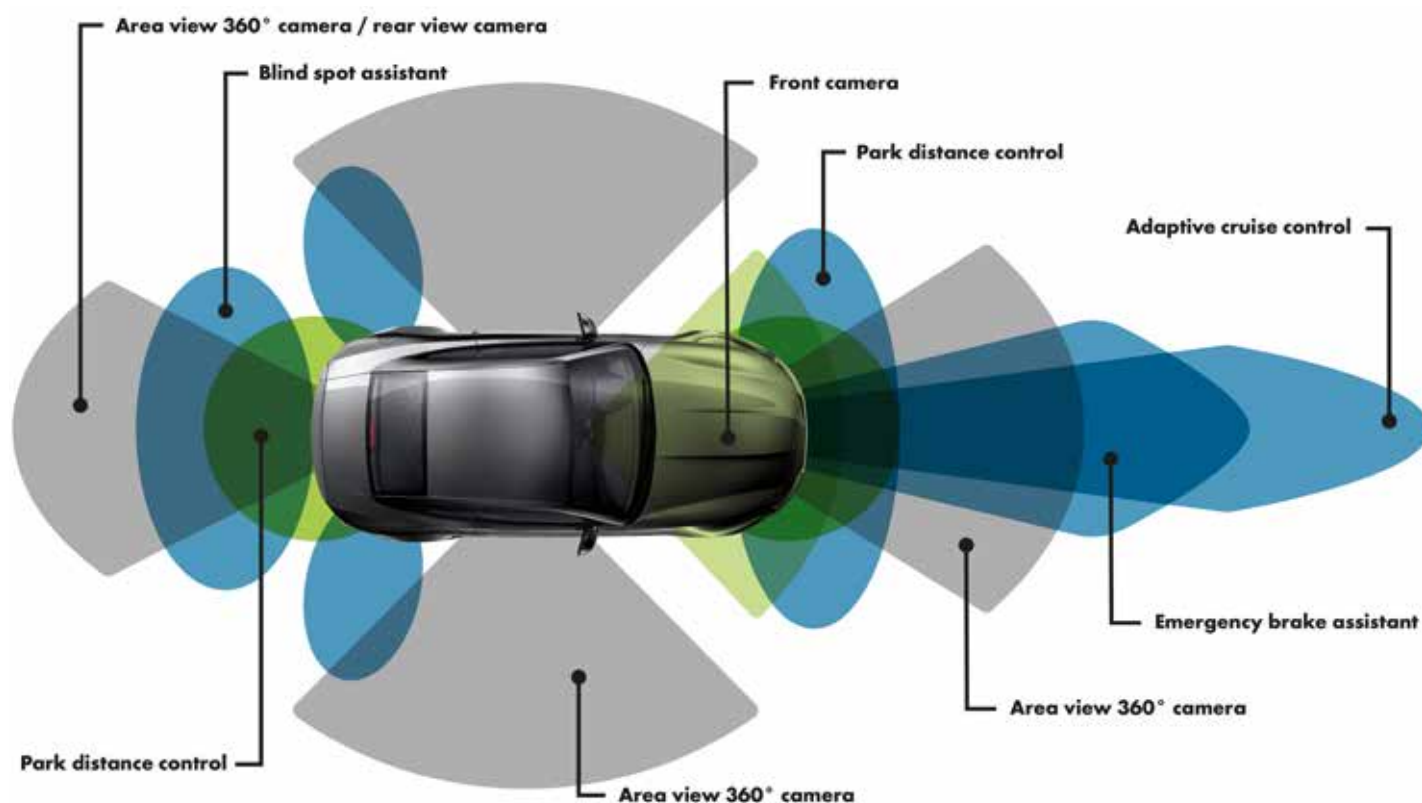
* With 5 calibrations per month, with a depreciation period of 2 years for the calibration system WOW! ACS cars.

SAFETY IS NOT OPTIONAL!

Approximately 95 % of all traffic accidents can be attributed to human error.

With increasing traffic volumes, the need for road safety is also growing. Modern vehicles are already equipped with a large number of sensors and cameras to ensure safety on the road.

Overview of driver assistance systems



➔ **EU regulations have made certain driver assistance systems mandatory in new vehicles as of 2022.**

➔ **All new vehicle registrations must be equipped with certain ADAS as standard as of 2024.**

➔ **The goal: „Vision Zero“ aims to virtually eliminate road fatalities in the EU by 2050.**



A MATTER OF THE RIGHT PERSPECTIVE

Why is calibration necessary?



Safety

Camera and radar sensors as well as other assistance systems contribute to improving road safety by support drivers and warn them of potential dangers.



Vehicle diagnostics

In modern vehicles, fault codes and diagnostic information are recorded by driver assistance systems. Vehicle diagnostics are essential and absolutely necessary for correct and professional calibration.



Parking aids

Reversing cameras and 360-degree cameras make parking and maneuvering in tight spaces easier.



Collision avoidance

Driver assistance systems play a crucial role in the detection of obstacles, vehicles or pedestrians on the road. Correct calibration is therefore essential to avoid collisions.

When do driver assistance systems need to be calibrated?

- After an accident
- With entry in the fault memory
- After replacing the windscreen
- In case of a malfunction or customer complaint
- After changes to the vehicle level (wheel alignment, lowering)
- A component was defective or was replaced
- After changing the installation position

Please follow the specifications and information provided by the respective manufacturer.

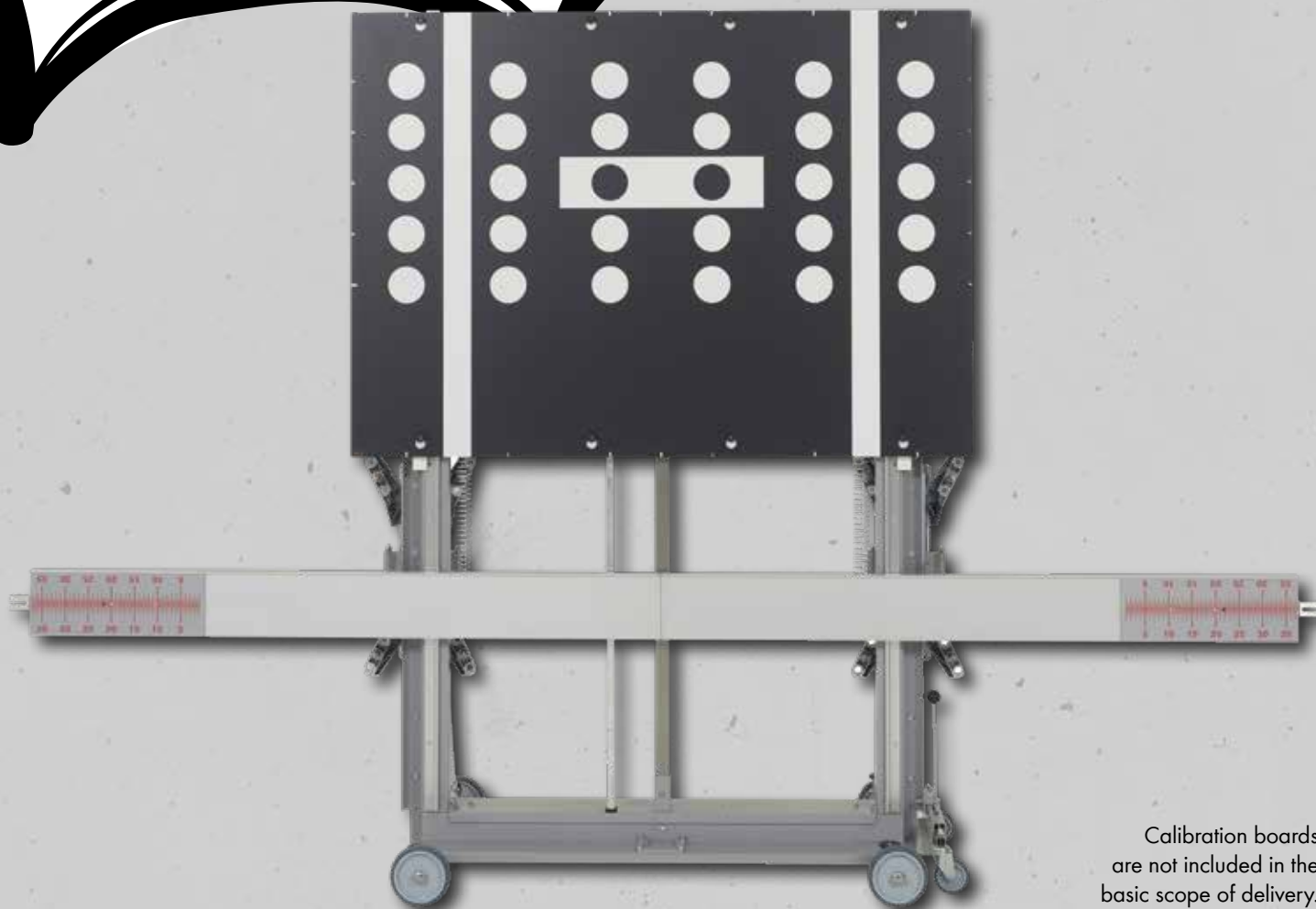
Well equipped in case of liability!

Many workshops and their customers are not aware of the consequences for a non-performed or incorrect calibration. But once an accident happens, the search for the cause.

In case of incorrectly calibrated advanced driver assistance systems, the workshop should prove that it has carried out everything correctly in accordance with the manufacturer's instructions. Workshops should be able to provide evidence by means of a record in which the proper calibration is documented.

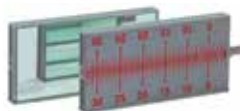
OUR SOLUTION: CALIBRATION SYSTEM WOW! ACS CARS

→ 100 % manufacturer compliant!



Calibration boards
are not included in the
basic scope of delivery.

Included
accessories:



Metal box with equipment only for Art. no. W074 200 000 included.

CALIBRATION SYSTEM WOW! ACS CARS

WOW! ACS CARS INCL. WHEEL CLAMPS

Art. no. W074 200 000

- Powder-coated, height-adjustable, spring-balanced calibration board carrier (1.0 m to 1.85 m) respectively trolley with manoeuvring wheels, handle and knurled screw
- Height adjustable and separable laser carrier (0.27 m to 1.0 m) with additional fine adjustment with two mounted laser pointers
- Measuring scale for height adjustment of calibration board holder and laser carrier
- Two self-centered four point-wheel clamps (for 11 - 25 inch wheel)

Metal box with following equipment:

line laser, measuring tape, two mirror /coil units and measuring tape holders

WOW! ACS CARS HUNTER

Art. no. W074 200 001

- Powder-coated, height-adjustable, spring-balanced calibration board holder (1.0 m to 1.85 m) or trolley with manoeuvring wheels, handle and knurled screw
- Height-adjustable and divisible crossbar with matching mount for Hunter ADAS kit*
- Measuring scale for height adjustment of calibration board holder and laser carrier
- 8 white and 8 black thumbscrews
- 1 measuring tape

* Hunter ADAS kit must be purchased separately through your Hunter distributor.

HUNTER
Engineering Company

**Suitable for the Hunter
wheel alignment**

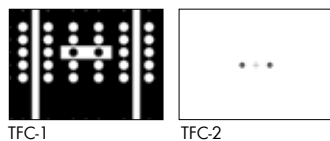
Technical data	
Material	Powder-coated, welded steel trolley
Dimensions (L x W x H)	1950 mm x 1200 mm x 800 mm
Weight	approx. 90.0 kg
Height adjustment of board holder	From 1000 mm to 1850 mm on linear guide rails
Total width of laser carrier bar	2820 mm
Laser type, laser carrier bar	Line laser, laser class 2
Power supply to laser in laser carrier bar	2 Mignon AA 1.5 V batteries per laser
Laser type, mounting plate	Line laser, laser class 2
Height adjustment of laser bar	From 270 mm to 1000 mm
Wheel clamp material	Galvanized with stainless steel mounting shaft
Clamping range of wheel clamp	11 - 25 inch rims

DOUBLE-SIDED PRINTED CALIBRATION TARGET

TFC-1 + TFC-2

Art. no. W074 210 000

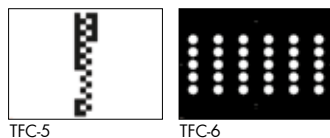
Double-sided printed



TFC-5 + TFC-6

Art. no. W074 210 002

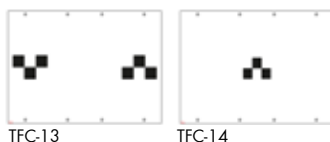
Double-sided printed



TFC-13 + TFC-14

Art. no. W074 210 006

Double-sided printed



TFC-3 + TFC-4

Art. no. W074 210 009

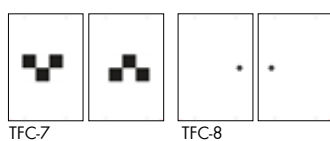
Double-sided printed



TFC-7 + TFC-8

Art. no. W074 210 003

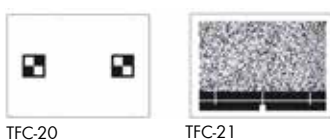
Two targets separated and double-sided printed



TFC-20 + TFC-21

Art. no. W074 210 011

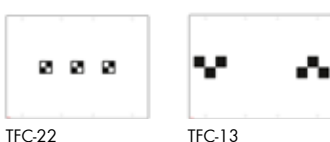
Double-sided printed



TFC-22 + TFC-13

Art. no. W074 210 012

Double-sided printed



Allocation of the vehicle models:

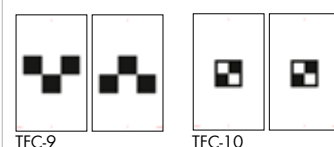
- TFC-1: Audi, Cupra, Porsche, Seat, Škoda, VW
- TFC-2: Mercedes
- TFC-3: Renault
- TFC-4: Citroën, DS Automobiles, Fiat, Opel, Peugeot, Toyota, Vauxhall
- TFC-5: Alfa Romeo, Fiat, Hyundai, Jeep, KIA
- TFC-6: Alfa Romeo
- TFC-7: Mercedes, Nissan
- TFC-8: Mazda 2
- TFC-9: Mazda
- TFC-10: Mitsubishi
- TFC-11: Lexus, Mazda 2, Suzuki, Toyota
- TFC-12: Toyota
- TFC-13: Nissan
- TFC-14: Hyundai Typ 1
- TFC-15: Honda Typ 1+2
- TFC-16: Honda
- TFC-17: Hyundai Santa Fe, KIA
- TFC-20: Suzuki
- TFC-21: Isuzu
- TFC-22: Toyota

Can only be used in combination with adjustment rails:

TFC-9 + TFC-10

Art. no. W074 210 004

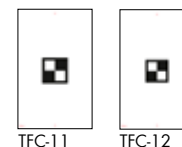
Two targets separated and double-sided printed



TFC-11 + TFC-12

Art. no. W074 210 005

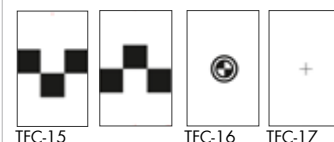
One target double-sided printed



TFC-15 + TFC-16/17

Art. no. W074 210 007

Two targets separated and double-sided printed



WOW! ACS CARS ACCESSORIES

Calibration mats TRV-1

Art. no. W074 203 000

For calibration of the rear view camera for vehicles of the Volkswagen Group.



Calibration mats TRV-2

Art. no. W074 203 001

For calibration of the rear view camera for Mercedes-Benz vehicles.



Calibration mats TAV-1

Art. no. W074 202 000

Manufacturer-specific calibration mats for exact calibration of 360° surround view camera systems in vehicles of the Volkswagen Group.



Cover

Art. no. W074 214 001

For optimal protection and long service life of the WOW! ACS cars calibration system.



Adjustment rails

Art. no. W074 210 008

For holding the calibration boards Mitsubishi and Mazda, Toyota 1 + 2, Honda 1 + 2 and Kia/Hyundai.



Scope of delivery:

two rails, one printed with dimensions

Radar-Kit TFR-2

Art. no. W074 211 001

Static adjustment of radar systems from, among others, Volkswagen, Audi, Seat, Skoda, BMW, FCA and Nissan models.



Scope of delivery:

reflector plate, holding device and distance laser

Calibration aids Volvo

Camera – Art. no. W074 210 010

Radar – Art. no. W074 211 003

Adjustment aids for various Volvo front camera systems and radar sensors.



Radar head socket wrench

Art. no. W074 211 004

The adjusting tool enables you to adjust the radar head of the Adaptive Cruise Control (ACC) on vehicles of the Volkswagen Group.



Case for measuring tools*

Art. no. W074 214 000

For storage and the protection of the WOW! ACS cars accessories. (Art. no. W074 200 000).



* Content not included.

CALIBRATION PROCEDURE

1 Call up the vehicle coverage list in the WOW! LOOQIT diagnostics software

2 Check for errors (read and erase)

3 Vehicle calibration with WOW! ACS cars

3.1

Mobile use of the system is possible thanks to the trolley with manoeuvring unit.



3.2

Adjustment of the calibration board holder for camera calibration by means of spring balancing. Possible up to 1.85 m and also suitable for vans.



3.3

Adjustment of the laser carrier for radar calibration (up to 1.0 m).



3.4

Raising and lowering of the manoeuvring wheels with the aid of the lifter lever to enable easy alignment parallel to the vehicle.



3.5

Quick attachment of the self-centring wheel clamp to 11-25 inch rims.



3.6

Easy adjustment on the trolley with star knob screw (alignment parallel to the rear axle of the vehicle).



4

Perform calibration with the diagnostics software.

5

Check for errors (read and erase)

6

Test drive before return to customers

TIPS & TRICKS FOR SUCCESSFUL CALIBRATION

1. Do not set the backup current too low

In principle, an external voltage stabiliser should be attached to the vehicle, which can supply a backup current greater than 30 A.

2. Note the height difference

After selecting the calibration board (target), ensure the correct fit on the test equipment carrier and that the screw colour matches the base colour of the target. In addition, the difference in height between the calibration system and the vehicle level must be taken into account.

3. Avoid distracting light sources

Often there are error messages such as "Lighting too bright", "Lighting too dark" or "Target not detected". This can be avoided if the workshop or adjustment area are illuminated appropriately and/or daytime running lights are covered.



4. Pay attention to the engine running

For some vehicle manufacturers, the engine must be at a stable idle during calibration. Pure "ignition on" is not enough here. In the WOW! software, this instruction is automatically displayed during calibration.

5. Switch on the ignition

With many vehicle models, the ignition switches off automatically after a certain time or they go into a power-saving mode. These functions can be deactivated by opening the driver's door. Alternatively, most manufacturers offer the option of putting the vehicle into "workshop mode ignition on".

6. Activate control units

Due to the component protection, many safety-related components such as radar units or cameras as well as their control units must be activated with the OE software after new installation.

ADAS LOOQIT SOFTWARE LICENSE

FOR ALL GLASS SPECIALISTS

The LOOQIT ADAS software package contains everything you need for vehicle diagnostics and the calibration of driver assistance systems:



- **OnBoard-Diagnosis** of the driver assistance systems in the vehicle
- **Read/ delete error memory and scan** of all systems including description and display of the errors.
- Extended functionality exclusively for driver assistance systems: **Data lists, actuator test** (actuator control), **calibration and coding basic settings**
- **Integrated customer and vehicle management** with storage of diagnostic and test logs
- Display of the **diagnostic connector position** in the vehicle



READY FOR FULL POWER OF VEHICLE DIAGNOSTICS?

The most popular diagnostic solution with full power

- ➔ **Interface WOW! LOOQER**
- ➔ **+ Input device DIALOOQ C15**
- ➔ **+ Software package of your choice**



Software package 1

Diagnostic data

+

Technical data

+

Vehicle hotline flat rate

Diagnostic and repair instructions from our automotive experts with years of professional and hotline experience.

Software package 2

Diagnostic data

+

Technical data

Technical information and data for maintenance, inspection and service, e.g. circuit diagrams, component arrangement and testing, service resets.

Software package 3

Diagnostic data

The diagnostic module for diagnostic function and vehicle data updates as well as new software functions for 75+ vehicle manufacturers.



OUR RECOMMENDATION for the full range of functions and maximum WOW! effect in the workshop!

WOW! SECURITY GATEWAY PORTAL

Your key to successful diagnostics on security gateway-protected vehicles.

The Security Gateway Portal (SGP) grants you access permissions to protected manufacturer systems.

All available vehicles, whose communication or individual functions are encrypted by security algorithms or security certificates are at your disposal.

The Security Gateway Portal is accessed via the WOW! LOOQIT diagnostic software.

Access and functionality is only possible with an active diagnostic license. After a one-time registration and authentication in the SGP, all vehicles of the available manufacturers can be accessed.

Security Gateway Basic

In the WOW! Expert diagnostic license, selected vehicle brands are included and can be activated in the SGP without additional costs (e.g., Mercedes-Benz, Volkswagen Group and Volvo).

Security Gateway Premium

With the Security Gateway Premium license (additional fee required), you can activate additional vehicle brands, such as Dacia, Ford, and Renault.

SGP access for IVECO still requires an additional license for a fee.



For further information please visit
www.wow-portal.com/securitygateway_en



ELECTRO MOBILITY WITH WOW!

WOW! diagnostics and air conditioning service systems provide you with everything you need as a VEHICLE EXPERT in the field of e-mobility.

Profitable work on high-voltage vehicles with the WOW! DIAL00Q diagnostic system

- Coverage of 320+ different vehicle models from 38+ manufacturers in the high-voltage range*
- Tesla as a manufacturer with the Model S [2012-] and Model X [2015-]
- Increasing vehicle coverage with each software update
- „High voltage / hybrid“ button for rapid detection of a possible battery electric vehicle (BEV) or hybrid vehicle
- Battery status test
- Diagnostic activation and reactivation process: Diagnostic disconnection and connection of the high-voltage system
- The highlight function „Flight recorder“ enables monitoring and testing of the electric drivetrain while driving



Keep your cool about A/C services with the WOW! COOLIUS A/C service systems

- Ready for hybrid and electric vehicles
- Ready for thermal management systems (for COOLIUS C20 and the Y-series)
- Permanent leak monitoring and ~ 100 % refrigerant recovery with maximum efficiency (for the COOLIUS A- and Y-series)



Further information about E-Mobility is available at www.wow-portal.com/emobility

MORE WOW! MOMENTS

FOLLOW US ON SOCIAL MEDIA



Facebook
@ WOW Würth Online World



LinkedIn
@ WOW! Würth Online World GmbH



Instagram
@ wuerthonlineworld



YouTube
@ WOW! Würth Online World GmbH



**WOW! KNOW-HOW
FOR MORE
WORKSHOP SUCCESS**



WOW! Würth Online World GmbH

Schliffenstraße 22
74653 Künzelsau – Germany

+49 7940 98188 - 0
+49 7940 98188 - 1099

www.wow-portal.com
info@wow-portal.com

MKT - WOW! - 04/2025
© Copyright 2025 - WOW! Würth Online World GmbH

WOW! Würth Online World GmbH
headquartered in Künzelsau
Stuttgart registration court, commercial registry no. B 738 283
VAT no.: DE 815 330 604

Follow us

