

VOLKSWAGEN

AKTIENGESELLSCHAFT



Operating manual

High-voltage test adapter VAS 6558/9-6A



Revision	Date	Reason
V00	15.10.2020	First edition

Legal notice

Manufacturer

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Preliminary information

Read through this operating manual carefully before using the product.

The product is delivered with a USB stick containing the operating manual in various languages. You can find the current version and additional languages on our homepage.

The operating manual is an essential part of the product and must be kept together with the product. If you sell or transfer ownership of the product, the operating manual must be handed over to the new operator.

In addition to this operating manual, you must observe all relevant regulations for diagnostics or troubleshooting of intrinsically safe high-voltage systems in road vehicles. This includes but is not limited to: instructions for the vehicle manufacturer's diagnostics systems, company-specific safety requirements and the state of the art for working with high-voltage systems.

Validity of the declaration of conformity

The declaration of conformity applies to the product described in the operating manual. Any changes, modifications or extensions shall void the declaration of conformity and the risk assessment.

Manufacturer specifications

CAR-connect GmbH



Since its founding, our company has focused on groundbreaking solutions for electromobility. CAR-connect develops and produces custom solutions for the automotive industry, repair shops and special vehicle fleets.

Our core business is developing and producing innovative high-voltage charging technology for electric vehicles. Our portfolio also includes measurement and diagnostic technology for the entire vehicle and battery analysis equipment.

With extensive experience in software and hardware development, CAR-connect is your dependable partner at every production stage, from prototyping to series production.

CAR-connect GmbH – Experience, Expertise and Innovation – MADE IN GERMANY

This safety chapter provides information about the following:

- The warning levels contained in this operating manual
- Important safety instructions for the product
- Intended use of the product
- Requirements for the target group

This operating manual is only valid for the following product:

Item number	22102831
Designation	High-voltage test adapter VAS 6558/9-6A

Warning levels

This chapter provides information about the warning levels used in this operating manual.

DANGER

Failure to observe the safety instructions **WILL** result in death or serious injury!

WARNING

Failure to observe with the safety instructions **CAN** result in death or serious injury!

CAUTION

Failure to observe the safety instructions **CAN** result in minor physical injury!

Important safety instructions

This chapter contains the safety instructions that must be observed when handling the product.



DANGER

Danger of fatal electric shock!

The electrical voltage in other systems is lethal and will cause death by electric shock!

- Do not use the product for measurements on utility power circuits!
- Never attempt to power other devices with the product!



WARNING

Danger of fatal electric shock!

The electrical voltage in high-voltage systems is lethal and can cause death by electric shock!

Liquids, condensation and high humidity can cause short circuits!

- Do not let the product come into contact with liquids!
- Use the product only in dry and enclosed spaces!



WARNING

Danger of fatal electric shock!

The electrical voltage in the product is dangerous and can cause serious injury or death from electric shock!

Defective and damaged products cannot guarantee protection against electrical voltage!

- Do not let the product come into contact with chemicals!
- Replace a defective or damaged product immediately!
- Never attempt to repair or tamper with the product!

Intended use

Use the product only in accordance with this operating manual; otherwise the electrical hazard protection provided by the product can no longer be guaranteed.

The product is used to adapt the VAS 6558/VAS 6558A high-voltage measurement module to the vehicle-side plug connection specified by the vehicle manufacturer in the guided fault finding.

The product is equipped with safety resistors and is suitable for the following measurements:

- Certified test for de-energized circuit according to the manufacturer's specifications
- Insulation resistance measurement
- Continuity measurement

In this operating manual, vehicle manufacturers are exclusively defined as vehicle manufacturers in the Volkswagen Group.

Any use beyond what is listed here is prohibited.

Requirements for the target group

Only qualified personnel may work with this product!

In this operating manual, qualified personnel is defined as personnel meeting all requirements for working on high-voltage systems applicable in the country of operation, as defined by:

- Regulations applicable in the country of operation
- Qualification according to DGUV 200-005 level 2 or higher, or equivalent
- Specifications from the vehicle manufacturer and/or the operator.

At all times while using the product, staff must wear the personal protective equipment prescribed by the vehicle manufacturer for work on high-voltage systems.

Duties of the operator

The operator is responsible for ensuring that all staff working with the measurement adapter fulfills the requirements for the target group.

The operator is also responsible for ensuring that the following conditions are met:

- The measurement adapter is always in perfect working order.
- The regular inspection intervals for the measurement adapter are observed and recorded.

Scope of delivery

Immediately check the condition of the product and the completeness of the delivery. If anything is missing or defective, please contact the manufacturer immediately.



- (1) High-voltage test adapter
- (2) USB stick with operating manual

Design









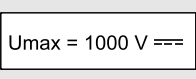
Product design:



- (1) Plug
- (2) Test sockets (see wiring diagram)
- (3) Socket

Symbols and connections

The following symbols are shown on the product:




Symbol	Meaning
	General warning symbols
	Electrical hazard! Read the operating manual!
	Serial number of the product
	Manufacturer part number
	Protection class II
	Disposal instruction
	Mark of conformity
	Vehicle manufacturer's certification mark
	Measurement category according to IEC 61010-31
	Schematic wiring diagram (see wiring diagram)

The product has the following connection areas:

TP1

TP2

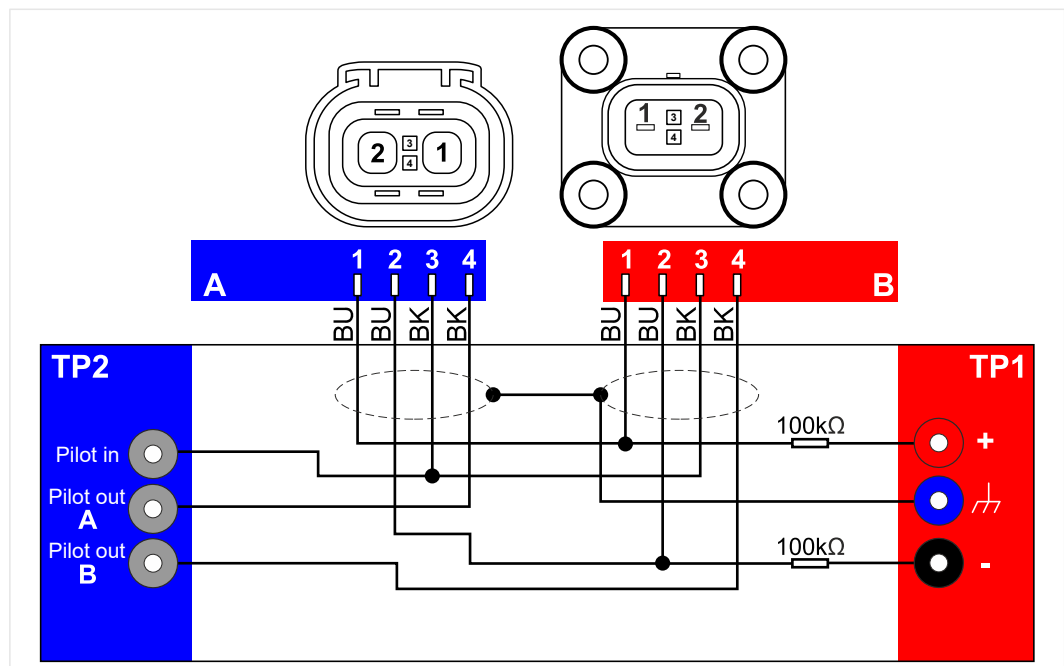
Connection area TP1 has the following sockets:

Connector	Function
	Ground socket
	Positive socket
	Negative socket

Connection area TP2 has the following sockets:

Connector	Function
	Pilot socket
	Pilot out A
	Pilot out B

Wiring diagram



Technical data

Rated data	Values
Manufacturer number	22102831
Maximum rated voltage	DC 1000 V
Maximum rated current	1 mA
Protection class	II / double insulated
Weight	~ 1000 g
Dimensions L/H/W	~ 182 mm/121 mm/52 mm
Cable length	864 mm

Ambient conditions	Operation	Storage	Transportation
Temperature	5 °C to 40 °C	-20 °C to 60 °C	-20 °C to 60 °C
Elevation above sea level	Max. 2000 m	No limitation	
Humidity	Max. 80 % up to 31° C, decreasing linearly to 50 % at 40° C	Max. 85 %	
	Condensation not permitted. Maximum permissible relative humidity: 60 % in environments with corrosive gas/air.		

This chapter provides information about the following activities:

- Startup
- Detaching the plug connection
- Cleaning
- Disposal
- Maintenance



WARNING

Danger of fatal electric shock!

The electrical voltage in high-voltage systems is lethal and can cause death by electric shock!

- Use the product only for the applications intended by the vehicle manufacturer!



CAUTION

Risk of damage!

Plug connections lock into place when attached.

- Unlock the plug connections before you detach them! (See chapter “Detaching the plug connections”)

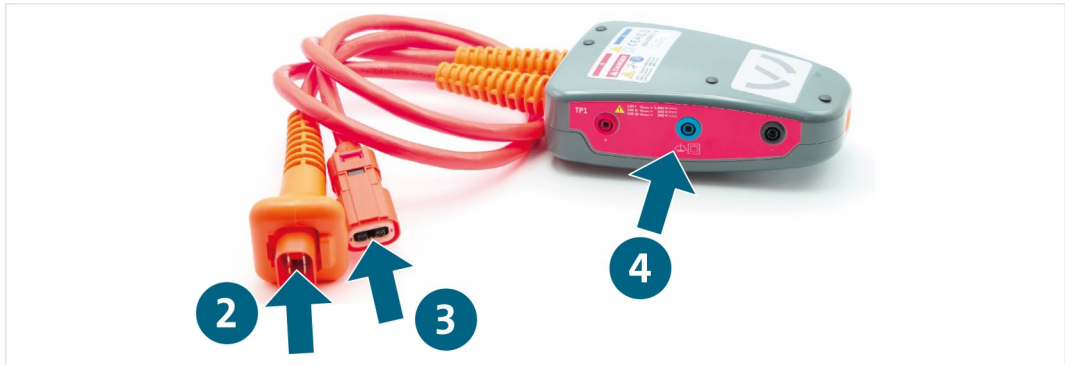
Startup

1. Observe the safety instructions.

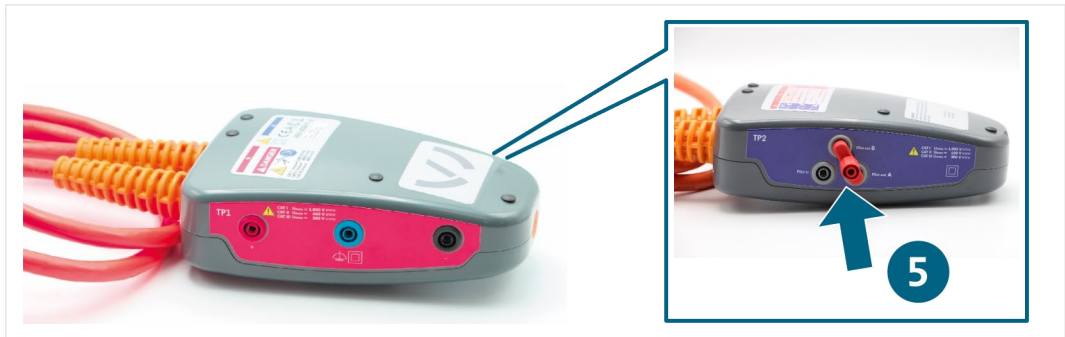


2. Connect the plug to the disconnected socket of the connection you want to test.
3. Connect the socket to the plug on the high-voltage battery.

4. Connect the high-voltage measurement module to the high-voltage test adapter according to the guided fault finding.



5. If necessary, bridge the pilot sockets according to the guided fault finding.



- ✓ You can now perform measurements in accordance with the guided fault finding.

Detaching the plug connections



WARNING

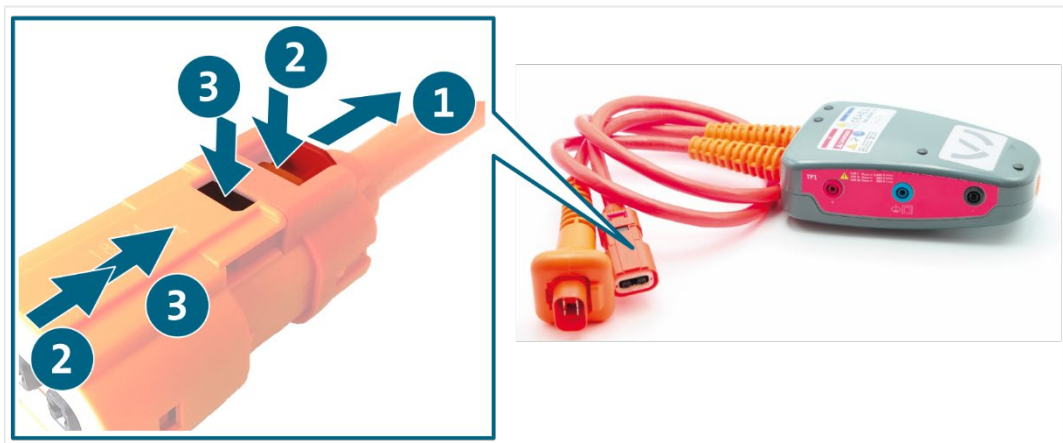
Risk of explosion!

Product components may produce sparks and electric arcs.

- Never disconnect high-voltage plug connections while under load!
- Do not use the product in potentially explosive atmospheres!
- Ensure that the product is at least 50 cm above the ground during operation!

The plug connections have an automatic locking mechanism. To detach a plug connection:

1. Make sure that the lever (red) is pulled out.
2. Push in the tongue (orange) and pull the plug connection apart as far as it will go.
3. Push the latch (black) in and pull the plug connection completely apart.



The plug connection is now detached.

Cleaning



DANGER

Danger of fatal electric shock!

The electrical voltage in high-voltage systems is lethal and will cause death by electric shock!

- Disconnect the product from all power sources before cleaning the product!

Observe the safety instructions!

Use only a dry cloth to clean the product.

Disposal

Observe the safety instructions!

Always dispose of the product in accordance with all local disposal regulations.

Maintenance

Observe the safety instructions!

National and local requirements for regular testing must be observed!

Test the product for proper function at intervals of no more than 24 months.

Contact the manufacturer to have a professional function test performed.

Warranty

CAR-connect GmbH grants a warranty period of 24 months from the date of purchase. The warranty is valid for demonstrable defects in functional material and workmanship.

Further information on the warranty conditions can be found in the terms and conditions on the manufacturer's website.

Customer service

Always include the serial number with any product queries. This number is found on the product.

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