



561 065 760 A

Assembly Instructions

Installation of original remote start feature accessory, Volkswagen Passat

Supplied in the kit:

- ◆ 1 x Wiring harness remote start feature with relay housing¹⁾
- ◆ 1 x Contact switch -F266-
- ◆ 4 x Plug connectors (4B0 972 623)
- ◆ 1 x Fixing material
- ◆ 1 x Installation instructions

¹⁾ See also Wiring harness remote start feature overview on page 2.

Special tools, test and measuring equipment, and other components required:

- ◆ Torx driver bits (set)
- ◆ Flat-headed screwdriver
- ◆ Side cutters
- ◆ -VAS 1978- wiring harness repair set
- ◆ Vehicle diagnosis, measurement and information system -VAS 505X-

Accessories²⁾:

- ◆ Vehicle key with remote start feature (4 buttons plus panic button). For the order use the customer's VIN.

²⁾ not included in the kit, please order separately using the vehicle's spare parts catalogue.

Procedure:

| |
|---|
| ! WARNING |
| Improper installation procedures can cause serious personal injury. |
| <ul style="list-style-type: none">● Installation should be performed only by a qualified technician.● Read all instructions thoroughly before starting.● Observe all safety precautions when working under a vehicle.● Beware of sharp edges to help prevent cuts.● Always wear safety glasses to help protect eyes.● Always wear protective gear as gloves and use caution when using hand tools. |

| |
|--|
| ! WARNING |
| Using unsuitable or damaged sockets and connecting cables and disregarding accepted safety practices may cause short circuits, accidents, and serious or fatal personal injury. |
| <ul style="list-style-type: none">● Never use damaged sockets and connecting cables. Check connectors and cables for damage before use.● Never allow connectors to come into contact with moisture, water and other fluids. |

i Note

- ◆ *The remote start feature can only be retrofitted on vehicles **with** an automatic transmission and **without** keyless access.*
- ◆ *The installation of the original retrofitting remote start feature must be carried out by a competent workshop. Special tools and the accompanying literature specific to the car are required for proper installation and function. Incorrect installation may damage the vehicle.*
- ◆ *Secure the wires so that they cannot come into contact with any rotating or other moving parts and so that they cannot chafe against any sharp metal or plastic edges.*
- ◆ *All rights to make technical changes without notice are reserved.*



1.1 Wiring harness remote start feature overview

1 - Additional relay housing

- ◆ Installation under the vehicle's relay housing
- ◆ With two relays plugged in
- ◆ With one empty relay socket

2 - Single wire to the rotary light switch

- ◆ Black/violet, 0.5 mm² with terminal pin
Label: "rotary light switch Pin A4"
- ◆ Single wire red, 0.5 mm² with plug connector

3 - Multi-wire cable to the start relay

- ◆ Red, 4.0 mm² with terminal pin and socket housing
- ◆ Black, 4.0 mm² with terminal pin and socket housing

4 - Multi-wire cable to the engine control unit

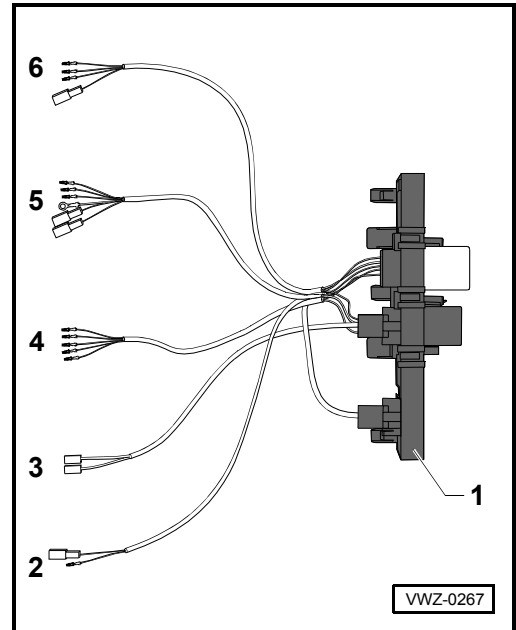
- ◆ Single wire violet/white, 0.5 mm² with terminal pin
- ◆ Single wire blue/green, 0.5 mm² with terminal pin
- ◆ Single wire blue/red, 0.5 mm² with terminal pin
- ◆ Single wire red/black, 0.35 mm² with terminal pin
- ◆ Single wire red/white, 0.5 mm² with terminal pin

5 - Multi-wire cable to steering column control unit

- ◆ Single wire red/violet, 0.5 mm² with terminal pin
Label: "steering column control unit Pin A1"
- ◆ Single wire red, 0.5 mm² with plug connector
- ◆ Single wire red/black, 0.35 mm² with terminal pin
Label: "steering column control unit Pin A6"
- ◆ Single wire black, 0.35 mm² with plug connector
- ◆ Single wire black, 0.5 mm² with terminal pin
Label: "steering column control unit Pin A14"
- ◆ Single wire brown, 0.5 mm² with ring eye
Label: "earthing point"

6 - Multi-wire cable to on-board power control unit

- ◆ Single wire violet/white, 0.5 mm² with plug connector
- ◆ Single wire black, 0.35 mm² with terminal pin
Label: "BCM_1 Pin C31"
- ◆ Single wire red/blue, 0.35 mm² with terminal pin
Label: "BCM_2 Pin C14"
- ◆ Single wire red/white, 0.5 mm² with terminal pin
Label: "BCM_3 Pin C34"



1.2 Installation overview

1 - Steering column control unit -J527-

- ◆ installed underneath the steering column

2 - BCM -J519-

- ◆ mounted on the relay and fuse box holder

3 - Start relay 1

- ◆ mounted in the relay and fuse box holder

4 - Rotary light switch

- ◆ on the driver's side dashboard

5 - Relay and fuse box holder

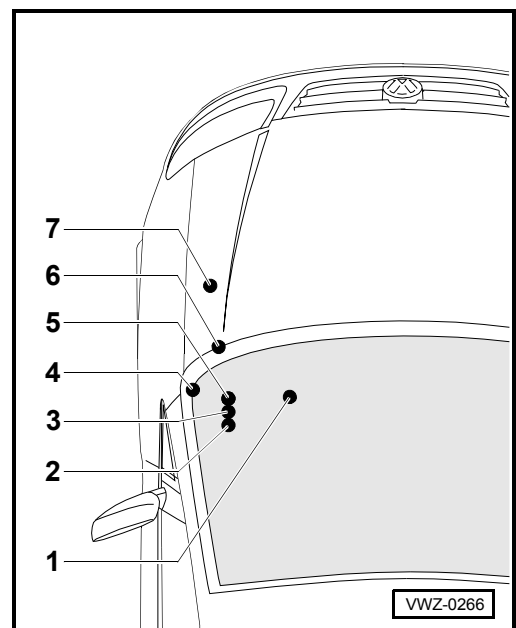
- ◆ in the passenger-side footwell

6 - Cable inlet

- ◆ from the interior to the engine compartment. Please use part of service/maintenance repair grommet

7 - Engine control unit -J623-

- ◆ next to the relay and fuse box holder in the engine compartment





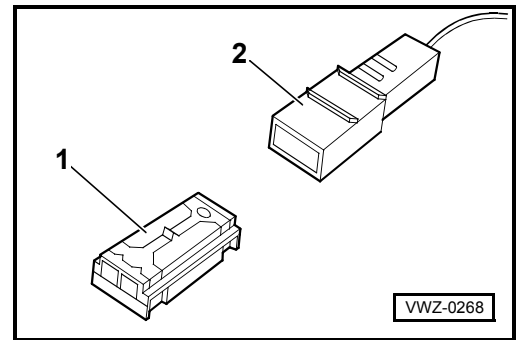
1.3 Supplied plug connectors

1 - 4B0 972 623

- ◆ 4pc supplied in the kit

2 - 8E0 972 763

- ◆ part of the wiring harness remote start feature (see overview)



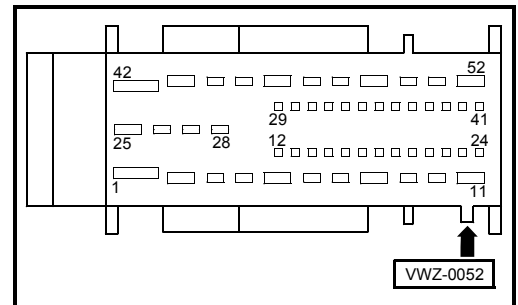
1.4 Overview of terminal pins on plug connectors

1.4.1 BCM -J519-:

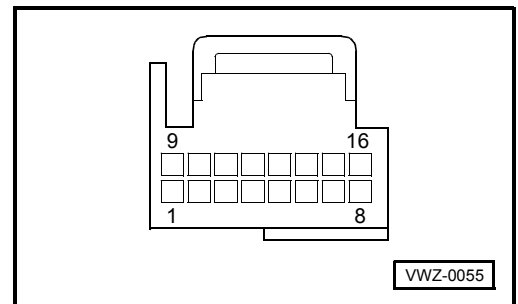


Note

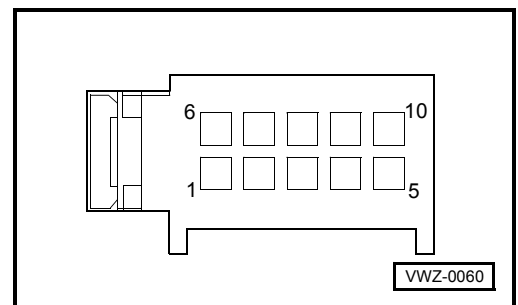
The three plug connectors on the BCM are different colours and have different mechanical encodings -arrow-. The numbering on the plug connectors is identical.



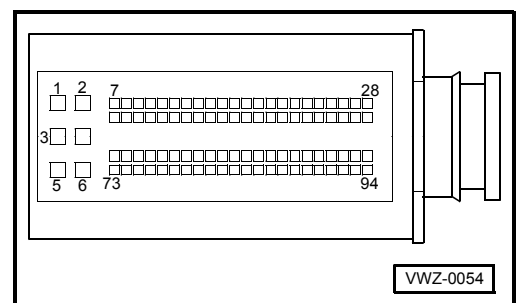
1.4.2 Steering column control unit -J527-:



1.4.3 Rotary light switch:



1.4.4 Engine control unit -J623-:



1.5 Preparatory work

- Disconnect battery.
- ⇒ ELSA; repair group 27
- Disconnect the left dashboard relay housing.
- ⇒ ELSA; repair group 97
- Remove the engine cover.
- ⇒ ELSA; repair group 10
- Remove air cleaner.
- ⇒ ELSA; repair group 23



1.6 Adapt the vehicle wiring harness

- Adapt the vehicle wiring harness as shown on the table and tick off every work step in the "Completed" column of the table.

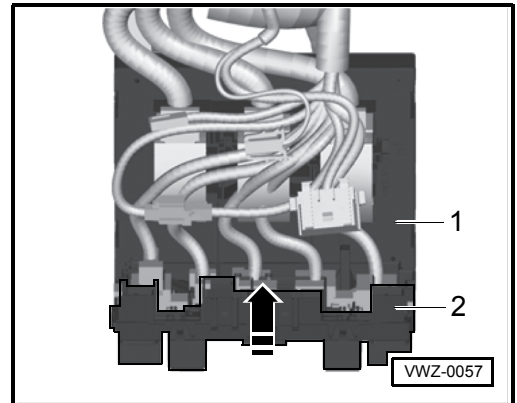
| Component | Adaptation step | Completed |
|--|---|-----------|
| BCM -J519- ⇒ terminal pins 1.4.1 | – Press the terminal pin on the brown plug connector out of chamber C31 and insulate it. | |
| | – Press the terminal pin on the brown plug connector out of chamber C14 and push it into the white plug connector in chamber B13 until it locks in place. | |
| | – Press the terminal pin on the white plug connector out of chamber B29 and insulate it. | |
| | – Press the terminal pin on the white plug connector out of chamber B28 and push it into the black plug connector in chamber A3 until it locks in place. | |
| Steering column control unit -J527- ⇒ terminal pins 1.4.2 | – Press the terminal pin out of chamber A14 and push it into chamber A7 until it locks in place. | |

1.7 Additional relay housing

Note

The illustration shows the on-board power control unit -1- in the left footwell from below.

- Attach the relay housing -2- supplied in kit to the on-board power control unit -1- and lock it in place.
- ⇒ ELSA; repair group 97

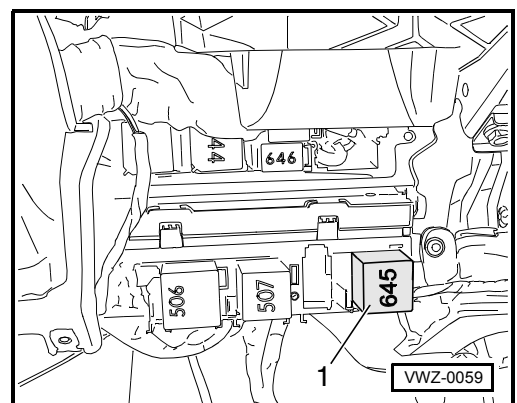
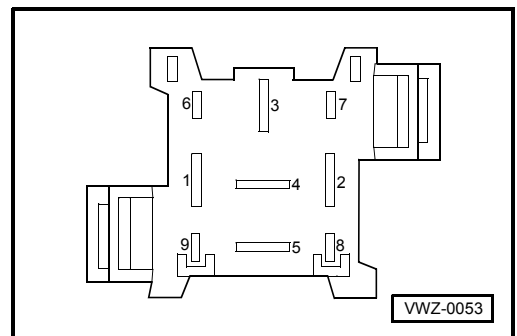


- Identify the vehicle's starter relay 1.

Note

Two relays printed with "645" are mounted on the relay and fuse box holder. Use the colours of the connecting wires to reliably identify starter relay 1: red/black wire in chamber 1, black wire in chamber 3 and red wire in chamber 5.

- Unlock starter relay 1 and pull it out of the relay socket.
- Pull the terminal pin out of chamber A5 on the now empty connecting socket on starter relay 1.
- Lock the pressed out terminal pin A5 into place on the connector piece included in the kit (red wire).
- Pull the terminal pin out of chamber A3 on the now empty connecting socket on starter relay 1.
- Lock the pressed out terminal pin A3 into place on the connector piece included in the kit (black wire).
- Lock the connector into place on the connector housing for the red single wire (⇒ Wiring harness remote start feature overview, -3-).





1.8 Connect the remote start feature wiring harness in the vehicle interior

- Connect the remote start feature wiring harness from the kit in the interior of the vehicle in accordance with the tables and tick off every work step in the "Completed" column of the table.

! WARNING

Never unplug the connector on the airbag control unit or connect parts of the wiring harness to wires leading to the airbag control unit.

| Wire colour | Connection on the plug connectors for the BCM -J519- ⇒ Wiring harness remote start feature overview, -6- ⇒ terminal pins 1.4.1 | Completed |
|--------------|--|-----------|
| red/blue | – Lock the terminal pin on the red/blue wire into place in the white connector in chamber B14. | |
| black | – Lock the terminal pin on the black wire into place in the brown connector in chamber C31. | |
| red/white | – Lock the terminal pin on the red/white wire into place in the brown connector in chamber C34. | |
| violet/white | – Press the terminal pin on the brown plug connector out of chamber C30. | |
| | – Push this terminal pin into chamber 1 of a supplied plug connector ⇒ 1.3 -1-. | |
| | – Connect this plug connector with the plug connector of the violet/white wire from remote start feature wiring harness. | |

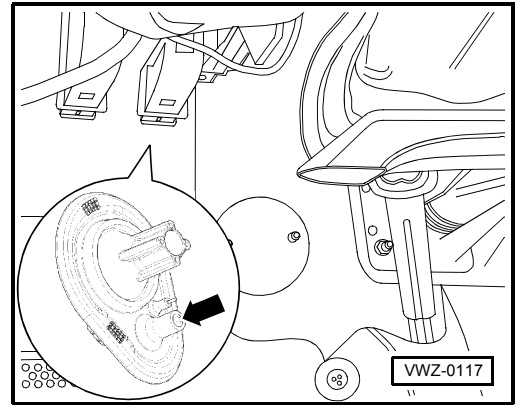
| Wire colour | Connection on the plug connector for the steering column control unit -J526- ⇒ Wiring harness remote start feature overview, -5- ⇒ terminal pins 1.4.2 | Completed |
|-------------|--|-----------|
| black | – Lock the terminal pin on the black wire into place in the connector in chamber A14. | |
| red/black | – Press the terminal pin on the plug connector out of chamber A6. | |
| | – Push this terminal pin into chamber 1 of a supplied plug connector ⇒ 1.3 -1-. | |
| | – Connect this plug connector with the plug connector of the black wire from remote start feature wiring harness. | |
| | – Push the terminal pin from the red/black wire labeled with "steering column control unit Pin A6" in the connector in chamber A6. | |
| red/violet | – Press the terminal pin on the plug connector out of chamber A1. | |
| | – Push this terminal pin into chamber 1 of a supplied plug connector ⇒ 1.3 -1-. | |
| | – Connect this plug connector with the plug connector of the red wire from remote start feature wiring harness. | |
| | – Push the terminal pin from the red/violet wire, labeled with "steering column control unit Pin A1" in the connector in chamber A1. | |
| brown | – Screw the ring eye on the brown wire onto the steering column earthing point. | |

| Wire colour | Connection to the vehicle's rotary light switch ⇒ Wiring harness remote start feature overview, -2- ⇒ terminal pins 1.4.3 | Completed |
|--------------|---|-----------|
| black/violet | – Disconnect the plug connector on the vehicle's rotary light switch. | |
| | – Press the terminal pin on the plug connector out of chamber A4. | |
| | – Push this terminal pin into chamber 1 of a supplied plug connector ⇒ 1.3 -1-. | |
| | – Connect this plug connector with the plug connector of the red wire from remote start feature wiring harness. | |
| | – Push the terminal pin from the black/violet wire, labeled with "rotary light switch Pin A4" in the connector in chamber A4. | |



1.9 Lay the remote start feature wiring harness in the vehicle's engine compartment and connect it

- Lay the wiring harness included in the kit from the vehicle's relay housing through the rubber grommet -arrow- in the bulkhead to the engine compartment.
- Lay the wiring harness to the engine control unit and attach it to the existing cables and the vehicle's holders using cable ties.
- Connect the wiring harness to the larger of the two plug connectors on the engine control unit in accordance with the corresponding table. Tick off each work step in the "Completed" column of the table. Cross out tables which are not required.



Note

Before plugging in additional terminal pins the blind plugs must be removed from the corresponding chamber of the plug connector. Also unlock and isolate original terminal(s) if present in chamber K45, K23 or B23.

Applies to: Vehicles with 2.0l TDI engine

| Wire colour | Handling ⇒ Wiring harness remote start feature overview, -4- ⇒ terminal pins 1.4.4 | Completed |
|--------------|---|-----------|
| blue/red | - Lock the terminal pin on the blue/red wire into place in the connector on the engine control unit in chamber K25. | |
| blue/green | - Lock the terminal pin on the blue/green wire into place in the connector on the engine control unit in chamber K26. | |
| violet/white | - Lock the terminal pin on the violet/white wire into place in the connector on the engine control unit in chamber K44. | |
| red/black | - Lock the terminal pin on the red/black wire into place in the connector on the engine control unit in chamber K45. | |
| red/white | - Lock the terminal pin on the red/white wire into place in the connector on the engine control unit in chamber K88. | |

Applies to: Vehicles with 1.8l TSI engine

| Wire colour | Handling ⇒ Wiring harness remote start feature overview, -4- ⇒ terminal pins 1.4.4 | Completed |
|--------------|---|-----------|
| violet/white | - Lock the terminal pin on the violet/white wire into place in the connector on the engine control unit in chamber B62. | |
| red/white | - Lock the terminal pin on the red/white wire into place in the connector on the engine control unit in chamber B67. | |
| red/black | - Lock the terminal pin on the red/black wire into place in the connector on the engine control unit in chamber B68. | |
| blue/green | - Lock the terminal pin on the blue/green wire into place in the connector on the engine control unit in chamber B87. | |
| blue/red | - Lock the terminal pin on the blue/red wire into place in the connector on the engine control unit in chamber B88. | |


Applies to: Vehicles with 2.5l FSI engine

| Wire colour | Handling ⇒ Wiring harness remote start feature overview, -4- ⇒ terminal pins 1.4.4 | Completed |
|--------------|---|-----------|
| violet/white | – Lock the terminal pin on the violet/white wire into place in the connector on the engine control unit in chamber K20. | |
| red/black | – Lock the terminal pin on the red/black wire into place in the connector on the engine control unit in chamber K23. | |
| red/white | – Lock the terminal pin on the red/white wire into place in the connector on the engine control unit in chamber K74. | |
| blue/green | – Lock the terminal pin on the blue/green wire into place in the connector on the engine control unit in chamber K75. | |
| blue/red | – Lock the terminal pin on the blue/red wire into place in the connector on the engine control unit in chamber K76. | |

Applies to: Vehicles with 3.6l FSI engine

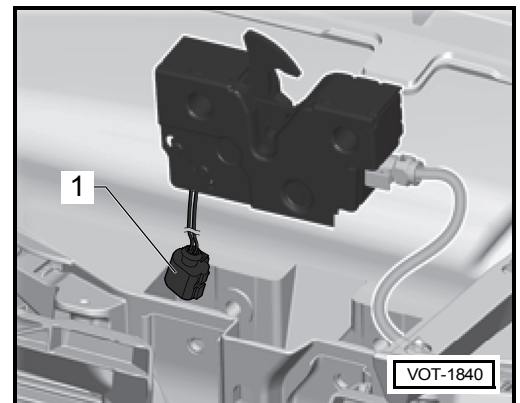
| Wire colour | Handling ⇒ Wiring harness remote start feature overview, -4- ⇒ terminal pins 1.4.4 | Completed |
|--------------|---|-----------|
| red/black | – Lock the terminal pin on the red/black wire into place in the connector on the engine control unit in chamber B23. | |
| red/white | – Lock the terminal pin on the red/white wire into place in the connector on the engine control unit in chamber B24. | |
| violet/white | – Lock the terminal pin on the violet/white wire into place in the connector on the engine control unit in chamber B39. | |
| blue/green | – Lock the terminal pin on the blue/green wire into place in the connector on the engine control unit in chamber B52. | |
| blue/red | – Lock the terminal pin on the blue/red wire into place in the connector on the engine control unit in chamber B74. | |

1.10 Installing the contact switch -F266-

- Remove the vehicle's hood lock.
- ⇒ ELSA; repair group 55
- Fit the contact switch included in the kit in the hood lock. Pull the pin connector -1- for the contact switch through the installation bay for the hood lock.
- ⇒ ELSA; repair group 55
- Lay the wires for the contact switch parallel to the control wire or the hood lock.

 Note

- ◆ *The anti-theft warning system connection to the vehicle wiring harness is located in the engine compartment on the cooler intake near the left headlight.*
- ◆ *The connections for the anti-theft warning system are protected against moisture by adhesive tape.*
- Connect the pin connector -1- to the anti-theft warning system connection.
- Secure the wire for the contact switch to the existing holders or vehicle wiring using the cable ties supplied.


1.11 Coding the remote start feature

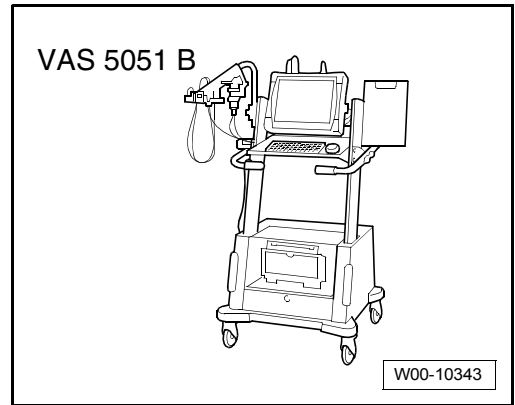
- Connect the battery
- ⇒ ELSA; repair group 27

 Note

- ◆ *After connecting the battery, ensure that the vehicle accessories (radio, clock, electrical windows) are checked in accordance with the workshop manual.*
- ◆ *After fitting is completed, the ESP light may light up. In this case, basic setting of the steering angle sensor -G85- must be carried out.*



- Connect a vehicle diagnostics, measurement and information system -VAS 505X- to the vehicle.
- ⇒ Electrical system, repair group 97; wiring, vehicle diagnostics, measurement and information systems; connecting a vehicle diagnostics, measurement and information system -505X-.
- Select the operating mode "Guided Troubleshooting" and then the respective vehicle within the vehicle diagnostics, measurement and information system -VAS 505X-.
- After querying the control units, select the "Functions/ component selection" via the button "Jump" and then sequentially the following menu options:
 - ◆ Software version management
 - ◆ Adapting Software
 - ◆ Perform conversion / retrofit
- Enter the 5 character action code "3740D".



The online connection is created after code entry and the software update carried out.











- Quit the "Guided Troubleshooting" using "Go to".

All error memory entries are deleted.

1.12 Concluding work and checking the remote start feature

- Teach in all of the new vehicle keys.
- ⇒ Vehicle electronics; Electrical system; repair group 96; lights, lamps, switches - internal; anti-theft protection; immobilizer; ignition key; ignition key adaptation
- Separate the connection to the vehicle diagnostics, measurement and information system -VAS 505X-.

The prerequisite conditions for all of the following work steps described in the "Remote start feature" chapter of the vehicle manual must be complied with!

- Perform a function and safety check on the "Remote start features":
 - ◆ Check that the engine starts with the vehicle key in the ignition switch.
 - ◆ Lock the vehicle from the outside by pressing the  button on the vehicle key.
 - ◆ Start the engine with the buttons on the vehicle key as follows: Press the  button once and then press the  button twice within 3 seconds.
 - ◆ Check whether the engine can be switched off by pressing the  button on the vehicle key.
 - ◆ Lock the vehicle from the outside again by pressing the  button on the vehicle key.
 - ◆ Start the engine with the buttons on the vehicle key again: Press the  button once and then press the  button twice within 3 seconds.
 - ◆ Check whether the engine can be switched off by pressing the  button on the vehicle key.
 - ◆ Briefly start the engine using the vehicle key in the ignition switch and switch it off again. Then leave the vehicle key in the ignition switch. Check whether the engine can be started as described above by pressing the  and  buttons on the vehicle key. This should not be possible if the vehicle key is in the ignition switch!
- Secure the remote start feature wiring harness to existing wires or brackets to help prevent rattles.
- Replace all disassembled components in reverse order.

When handing over the vehicle, please refer the customer to the "Remote start feature" chapter in the vehicle manual and provide them with these installation instructions.