



561 065 760 C

# Assembly Instructions

## Installation of original remote start feature accessory, Volkswagen Passat GP

### Supplied in the kit:

- ◆ 1 x Wiring harness remote start feature with relay housing<sup>1)</sup>
- ◆ 4 x Plug connectors (4B0 972 623)
- ◆ 1 x Fixing material
- ◆ 1 x Installation instructions

<sup>1)</sup> 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-

### Accessories:

(not included in the kit, if necessary order separately by using the vehicle's spare parts catalogue and the customer's VIN)

- ◆ Vehicle key with remote start feature with 4 buttons plus panic button
- ◆ 4H0 951 253 A Starter relay printed with "645" <sup>2)</sup>
- ◆ BCM -J519- <sup>3)</sup>
- ◆ Contact switch -F266- <sup>4)</sup>

<sup>2)</sup> only for vehicles with keyless access

<sup>3)</sup> BCM high+ is required (for example all vehicles with factory-fitted fog lights and PR no. 8WH). If necessary check with vehicle diagnostics, measurement and information system

<sup>4)</sup> only if not present in the vehicle (see also "Installing the contact switch -F266-" on page 10)

### Procedure:

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

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

### **i** Note

- ◆ The remote start feature can only be retrofitted on vehicles **with** an automatic transmission.
- ◆ 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 - Y-adapter

- ◆ With terminal pin and plug connector

### 3 - Single wire to the rotary light switch

- ◆ Black/violet, 0.5 mm<sup>2</sup> with terminal pin
- ◆ Single wire red, 0.5 mm<sup>2</sup> with plug connector

### 4 - Single wire to starter

- ◆ Single wire red, 4.0 mm<sup>2</sup> with terminal pin (→ starter)

### 5 - Multi-wire cable to the engine control unit

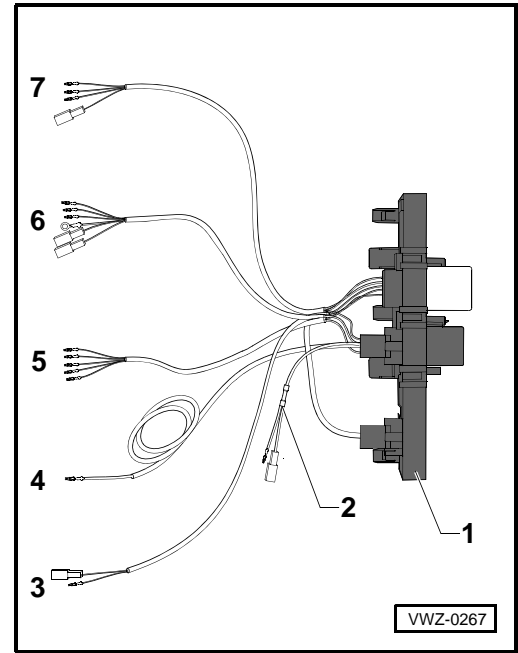
- ◆ Single wire violett/white, 0.5 mm<sup>2</sup> with terminal pin
- ◆ Single wire blue/green, 0.5 mm<sup>2</sup> with terminal pin
- ◆ Single wire blue/red, 0.5 mm<sup>2</sup> with terminal pin
- ◆ Single wire red/black, 0.35 mm<sup>2</sup> with terminal pin
- ◆ Single wire red/white, 0.5 mm<sup>2</sup> with terminal pin

### 6 - Multi-wire cable to steering column control unit -J527- or electronic steering column lock control unit -J764-

- ◆ Single wire red/violet, 0.5 mm<sup>2</sup> with terminal pin
- ◆ Single wire red, 0.5 mm<sup>2</sup> with plug connector
- ◆ Single wire red/black, 0.35 mm<sup>2</sup> with terminal pin
- ◆ Single wire black, 0.35 mm<sup>2</sup> with plug connector
- ◆ Single wire black, 0.5 mm<sup>2</sup> with terminal pin
- ◆ Single wire brown, 0.5 mm<sup>2</sup> with ring eye

### 7 - Multi-wire cable to on-board power control unit

- ◆ Single wire violett/white, 0.5 mm<sup>2</sup> with plug connector
- ◆ Single wire black, 0.35 mm<sup>2</sup> with terminal pin
- ◆ Single wire red/blue, 0.35 mm<sup>2</sup> with terminal pin
- ◆ Single wire red/white, 0.5 mm<sup>2</sup> with terminal pin



## 1.2 Installation overview

### 1 - Steering column control unit -J527- or electronic steering column lock control unit -J764-

- ◆ 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

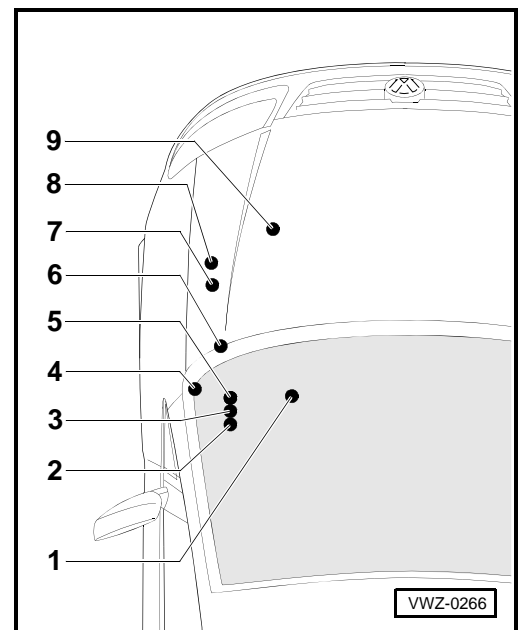
### 7 - Terminal 30

- ◆ in the electronics box in the engine compartment

### 8 - Engine control unit -J623-

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

### 9 - Starter





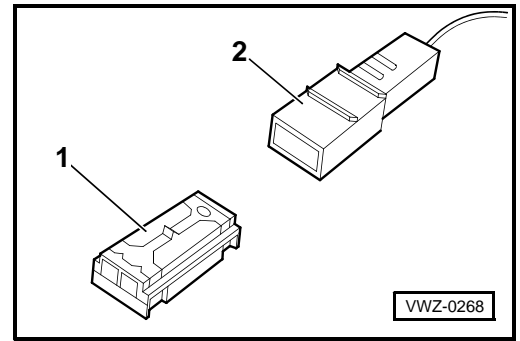
### 1.3 Supplied plug connectors

**1 - 4B0 972 623**

- ◆ 4pc supplied in the kit

**2 - 8E0 972 763**

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



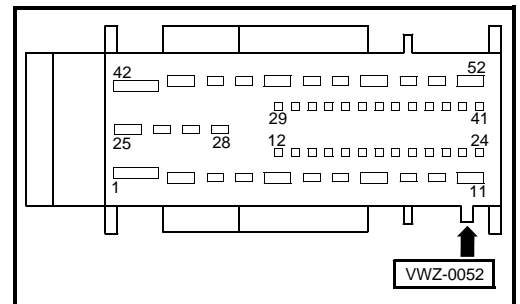
### 1.4 Overview of terminal pins on plug connectors

**1.4.1 BCM -J519-:**

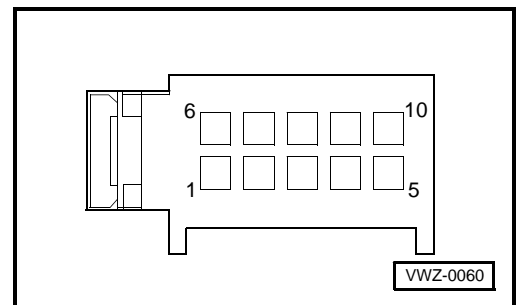


**Note**

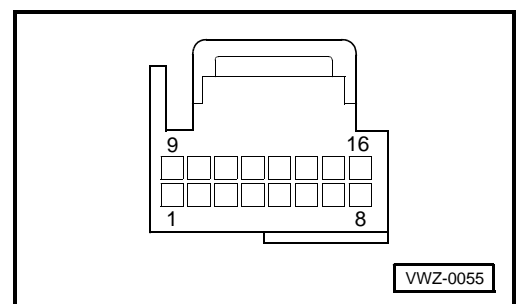
The three plug connectors on the BCM are different colours and have different mechanical encodings -arrow-. The numbering on the plug connectors is identical.



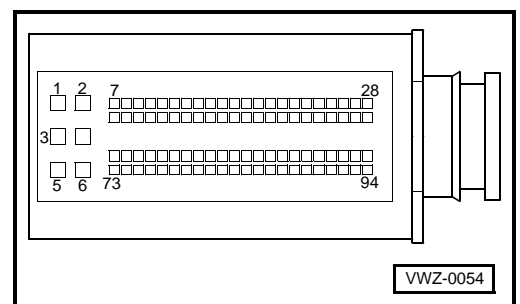
**1.4.2 Rotary light switch:**



**1.4.3 Steering column control unit -J527- or electronic steering column lock control unit -J764-:**



**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

Remove the additional Relay Housing from the Kit. (Shows under 1.1)

**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.	

Applies to: Vehicles without keyless access:

Component	Adaptation step	Completed
Steering column control unit -J527- ⇒ terminal pins 1.4.3	- Press the terminal pin out of chamber A14 and push it into chamber A7 until it locks in place. If in chamber A7 a terminal pin is located, just isolate the terminal pin out of chamber A14.	

Applies to: Vehicles with keyless access:

Component	Adaptation step	Completed
Electronic steering column lock control unit -J764- ⇒ terminal pins 1.4.3	- Press the terminal pin out of chamber A8 and insulate it (⇒ only if located in the vehicle).	



## 1.7 Additional relay housing

### Note

Remove the additional housing from the kit and use empty relay places in the relay pannel above the BCM

### Applies to: Vehicles with keyless access:

- Unlock starter relay -2- printed with "507" and pull it out of the relay socket. (Relay Place Nr. 7)

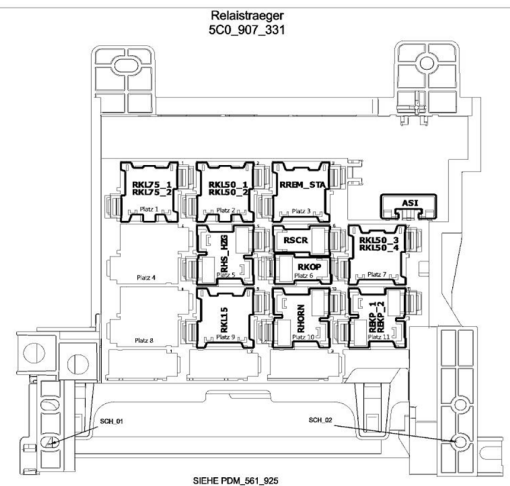
### Applies to: Vehicles without keyless access:

- Unlock starter relay -2- printed with "645" and pull it out of the relay socket. (Relay Place Nr. 7)

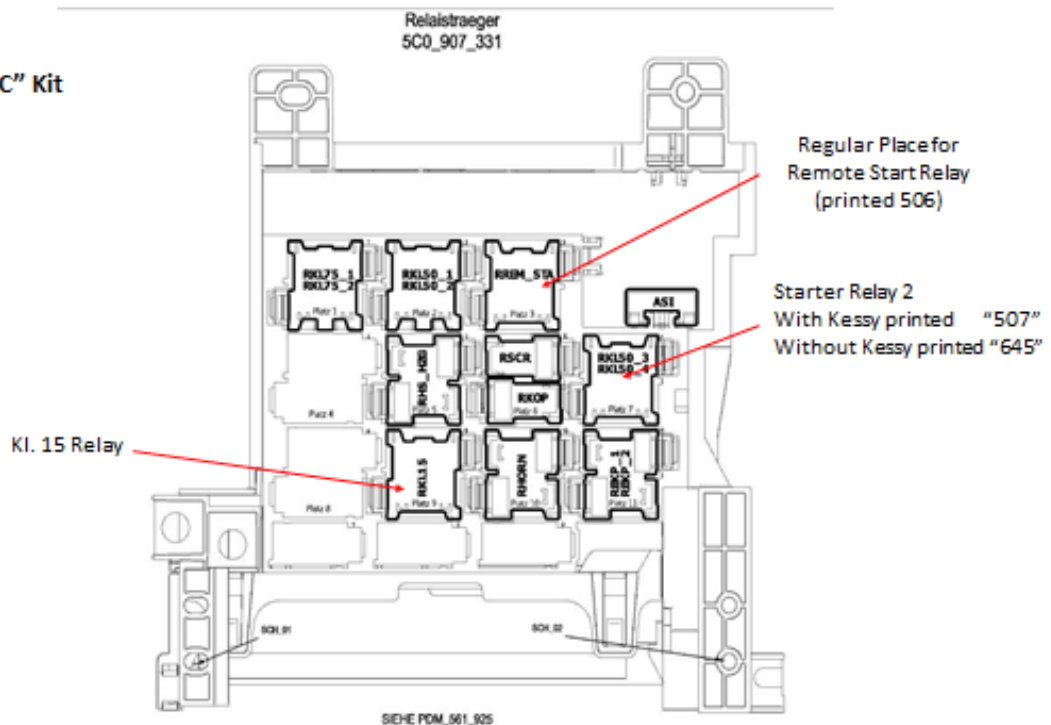
### Continue for all vehicles:

### Note

The starter relay printed with "645" is not included in the kit and must order separately for vehicles with keyless access (see "Accessories" on page 1).



### Remotestart "C" Kit



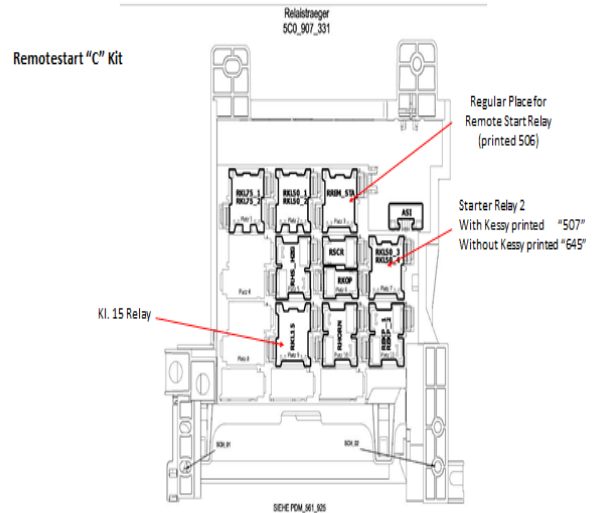


## 1.8 Connect the remote start feature wiring harness in the vehicle interior

### ! 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.**

- Unlock the Kl.15 relay mounted in the relay and fuse box  
Place "9" and pull it out of the relay socket.
- Press the terminal pin on the relay socket out of chamber A5.
- Connect this terminal pin with the plug connector of the Y-adapter (see page 1, 1.1, -2-) from remote start feature wiring harness.
- Push the free terminal pin from the Y-adapter in chamber A5 on the relay socket.
- Push the relay -1- back in the relay and fuse box holder.



- 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.

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 to the vehicle's rotary light switch ⇒ Wiring harness remote start feature overview, -2- ⇒ terminal pins 1.4.2	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 in the connector in chamber A4.	


**Applies to: Vehicles without keyless access:**

Wire colour	Connection on the plug connector for the steering column control unit -J527- ⇒ Wiring harness remote start feature overview, -5- ⇒ terminal pins 1.4.3	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 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 in the connector in chamber A1.	
brown	- Screw the ring eye on the brown wire onto the steering column earthing point.	

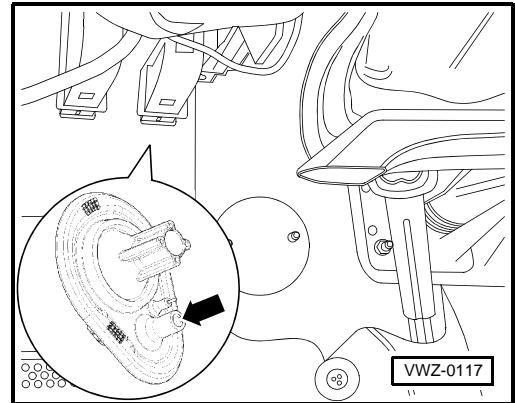
**Applies to: Vehicles with keyless access:**

Wire colour	Connection on the plug connector for the electronic steering column lock control unit -J764- ⇒ Wiring harness remote start feature overview, -5- ⇒ terminal pins 1.4.3	Completed
black	- Lock the terminal pin on the black wire into place in the connector in chamber A8.	
red/black	- Press the terminal pin on the plug connector out of chamber A12.	
	- 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 in the connector in chamber A12.	
red/violet	- Press the terminal pin on the plug connector out of chamber A2.	
	- 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 in the connector in chamber A2.	
brown	- Screw the ring eye on the brown wire onto the steering column earthing point.	



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

- Lay the not connected part of the wiring harness through the rubber grommet -arrow- in the bulkhead to the engine compartment.
- Lay the multi-wire with 5 cables to the engine control unit and attach it to the existing cables and the vehicle's holders using cable ties.



- Connect the 5 cables 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.	



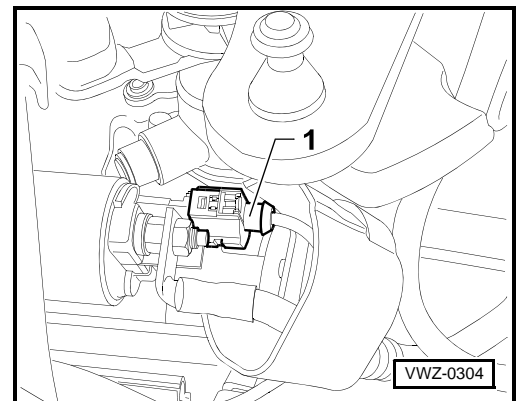

**Applies to: Vehicles with 2.5l FSI engine**

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.	

- Lay the red single wire with terminal pin to the starter of the vehicle and attach it to the existing cables and the vehicle's holders using cable ties.
- Remove the protective cap from the starter.
- Release and disconnect connector -1-.
- Remove the socket housing and insulate the terminal pin of the wire.
- Put the terminal pin of the red single wire from the remote start feature wiring harness in the socket housing and connect it to the starter.
- Instal the protective cap on the starter.





## 1.10 Installing the contact switch -F266-

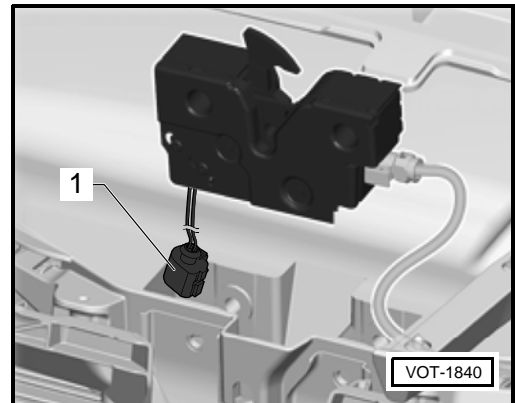
### Note

Retrofitting only if contact switch -F266- is not present in the vehicle.

- Remove the vehicle's hood lock.  
⇒ ELSA; repair group 55
- Fit the contact switch 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

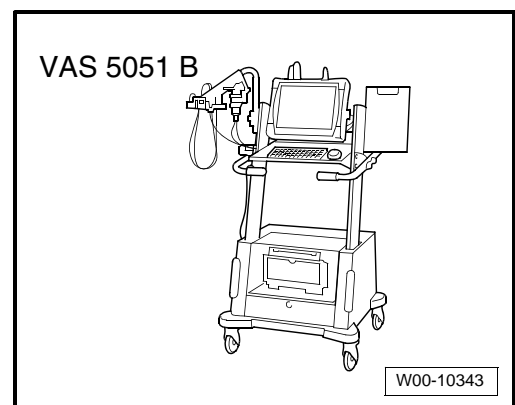
### Note

- ◆ 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.**



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