



00 – Technical data

1 Safety information

(VRL012348; Edition 11.2018)

⇒ [“1.1 Safety measures when working on vehicles with a start/stop system”, page 1](#)

⇒ [“1.2 Safety precautions when using test and measuring equipment during a road test”, page 1](#)

1.1 Safety measures when working on vehicles with a start/stop system

Risk of injury due to unexpected engine start

If the vehicle's start/stop system is activated, the engine can start unexpectedly. A message in the dash panel insert indicates whether the start/stop system is activated.

- To deactivate start/stop system: switch off ignition.

1.2 Safety precautions when using test and measuring equipment during a road test

Risk of injury due to inadequately secured test and measuring equipment

When the front passenger airbag is deployed in an accident, insufficiently secured test and measuring equipment become dangerous projectiles.

- Secure test and measuring equipment on the rear seat.

or

- Have a second person operate the test instruments and measuring equipment on the rear seat.



1 - Boot

2 - Cover

- For positive battery terminal

3 - Battery terminal clamp

- For positive cable
- Disconnecting and re-connecting battery ⇒ [page 13](#)
- Specified torque of nut: 6 Nm

4 - Electrical connector

- For battery monitor control unit - J367
- Observe specified sequence for work steps when connecting earth cable ⇒ [page 13](#)

5 - Cover

- For negative battery terminal

6 - Nut

- 20 Nm

7 - Earth cable

- With battery terminal clamp and battery monitor control unit - J367-
- Adapting battery monitor control unit - J367- ⇒ [page 22](#)
- Disconnecting and connecting ⇒ [page 13](#)
- Removing and installing ⇒ [page 21](#)
- Specified torque for nut on battery clamp: 6 Nm

8 - Battery - A-

- Removing and installing ⇒ [page 8](#)
- Disconnecting and connecting ⇒ [page 13](#)
- Renewing (on vehicles equipped with Start/Stop system) ⇒ [page 9](#)

9 - Bolt

- Qty. 3
- 9 Nm

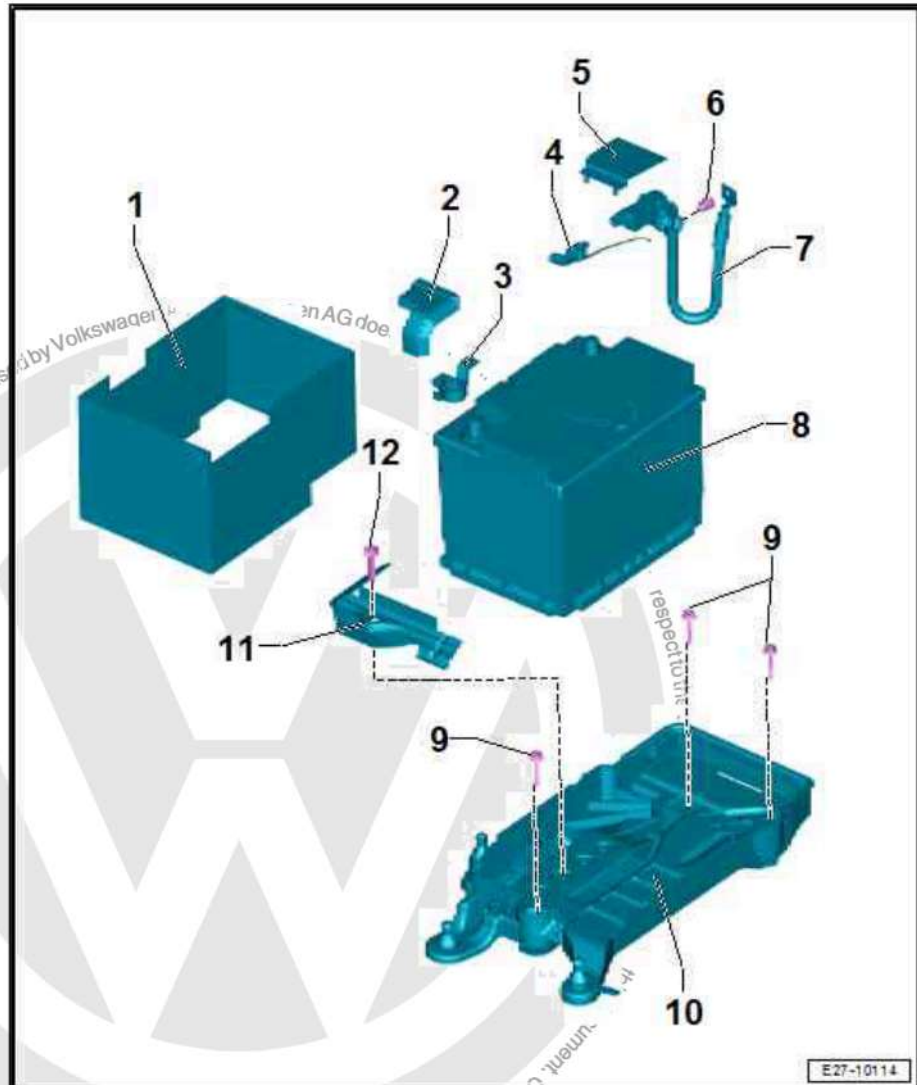
10 - Battery tray

- Removing and installing ⇒ [page 17](#)

11 - Retaining clip

12 - Bolt

- 20 Nm






- Keep the ignition key outside the vehicle to prevent the ignition from being switched on unintentionally.
- Remove fuse holder A - SA- from battery clamp, and lay it aside with lines connected => [page 222](#) .
- Pull heat insulation sleeve -4- upwards slightly.
- Unscrew bolt -2- on securing bracket -1-.
- Detach securing bracket -1-.
- Lift out battery -3- from engine compartment at an angle of 45°.

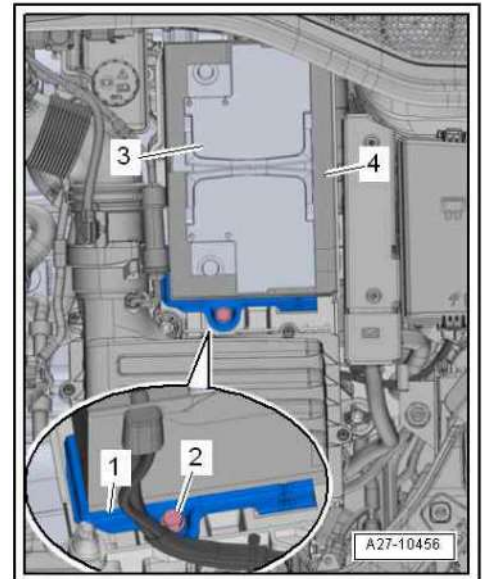
Installing

Install in the reverse order of removal, observing the following:

 **Caution**

A loosely fitted battery creates the following dangers:

- ◆ *Shortened service life caused by vibration damage (danger of explosion).*
- ◆ *The plates in the battery cells will be damaged if the battery is not secured correctly.*
- ◆ *Damage to battery casing by clamping bracket (possible leakage of acid with high consequential costs).*
- ◆ *Poor crash safety.*



 **Note**

- ◆ *Only install maintenance-free batteries in accordance to specifications "TL82506" (as of December 1997) and "VW75073" (as of August 2001).*
- ◆ *Batteries from the replacement parts range feature a base strip adapter for matching to different retainer flanges.*
- ◆ *The => battery operating instructions give details of when and how to use the base strip adapter.*

Vehicles with start/stop system

 **Note**

- ◆ *Due to higher demands on the deep-cycle resistance, a special battery is used in vehicles equipped with a start/stop system.*
- ◆ *When renewing the battery, note the correct part designation.*
- ◆ *Batteries intended for use in vehicles with a start/stop system are marked "AGM" (Absorbent Glass Mat) or "EFB" (Enhanced Flooded Battery).*



1.4 Removing and installing battery tray

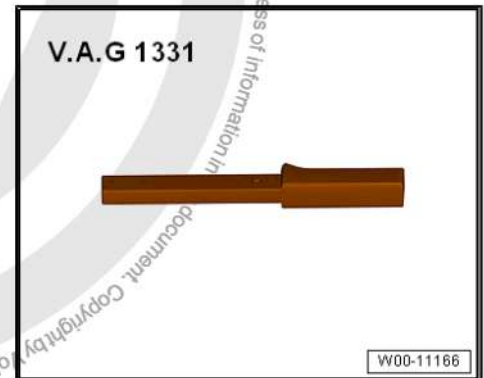
⇒ ["1.4.1 Removing and installing battery tray, battery in engine compartment", page 17](#)

⇒ ["1.4.2 Removing and installing battery tray, battery in luggage compartment", page 18](#)

1.4.1 Removing and installing battery tray, battery in engine compartment

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-



Removing

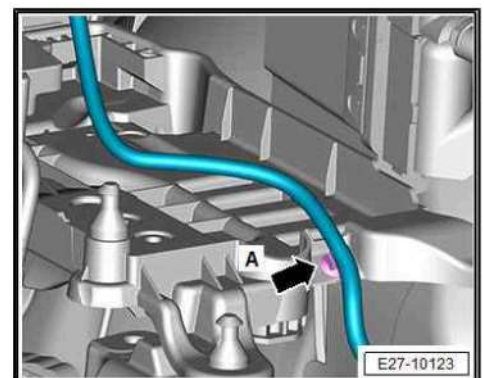
- Remove battery - A- ⇒ [page 8](#) .
- If necessary, remove air filter housing ⇒ Rep. gr. 23 ; Air filter; Removing and installing air filter housing or ⇒ Rep. gr. 24 ; Air filter; Removing and installing air filter housing .

Vehicles with diesel engine

- If fitted, remove control unit for NOx sender - GX30- with bracket from battery tray ⇒ Rep. gr. 23 ; Senders and sensors; Removing and installing control unit for NOx sender - GX30- .

Continued for all vehicles

- Move aside wiring harness on battery tray -arrow A-





1.7 Removing and installing earth wire with battery monitor control unit - J367-

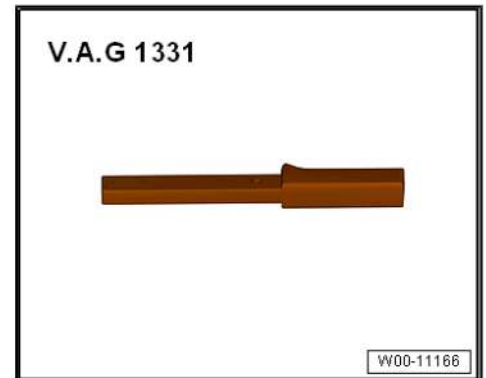
⇒ ["1.7.1 Removing and installing earth cable with battery monitor control unit J367 , battery in engine compartment"](#), page 21

⇒ ["1.7.2 Removing and installing earth cable with battery monitor control unit J367 , battery in luggage compartment"](#), page 21

1.7.1 Removing and installing earth cable with battery monitor control unit - J367- , battery in engine compartment

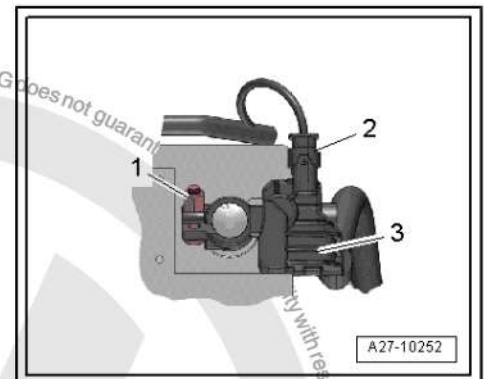
Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-



Removing

- Remove battery - A- ⇒ [page 8](#) .
- Separate electrical connector -2- on battery monitor control unit - J367- -3-.



- Unscrew nut -2-.
- Remove earth wire with battery monitor control unit - J367- -1-.

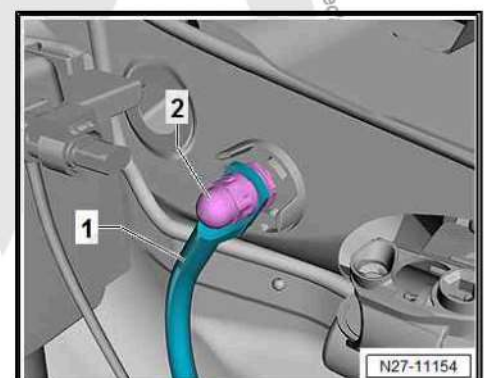
Installing

Install in the reverse order of removal, observing the following:

- Adapt battery monitor control unit - J367- ⇒ [page 22](#) .

Specified torques

- ◆ ⇒ ["1.1.1 Assembly overview - battery; battery in engine compartment"](#), page 5

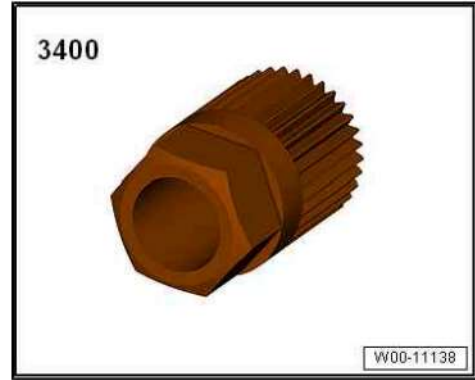


1.7.2 Removing and installing earth cable with battery monitor control unit - J367- , battery in luggage compartment

Special tools and workshop equipment required



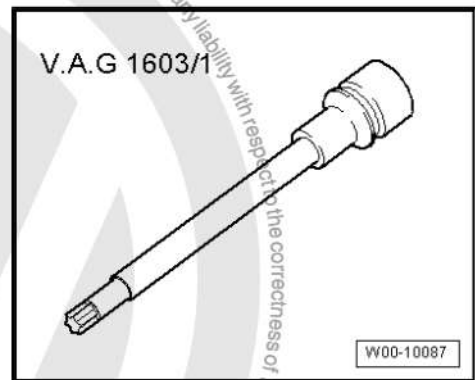
◆ Multipoint adapter - 3400-



◆ Torque wrench - V.A.G 1332-



◆ TORX driver bit - V.A.G 1603/1-



Removing

- Remove alternator - C- ⇒ [page 28](#) .
- Clamp alternator - C- in a vice at securing points.
- Lever off poly V-belt pulley cap.

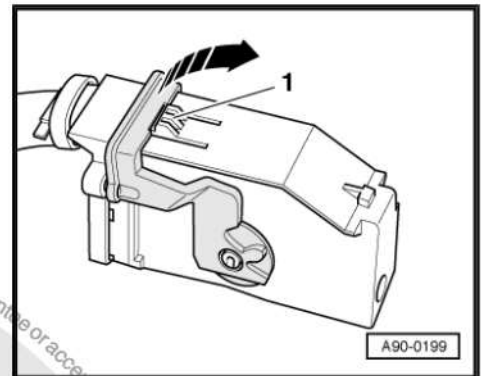
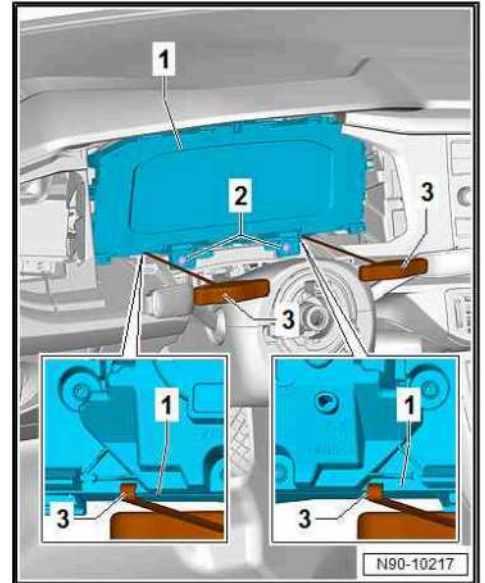


- Unscrew bolts -2-.
- Insert hooks - T10538- -3- between dash panel insert - KX2- -1- and dash panel, and fit them to dash panel insert as shown in illustration.

i Note

The dash panel insert - KX2- is engaged in the dash panel. Therefore, a greater force is necessary to remove it.

- Release dash panel insert - KX2- -1- from fasteners in dash panel using the two hooks - T10538- -3-.
- Pull out dash panel insert - KX2- so that connectors become accessible.
- Separate electrical connector.
- Press locking detent -1- to disconnect connector.
- Swing retainer in -direction of arrow- and pull off connector.
- Release and disconnect MOST bus connector.



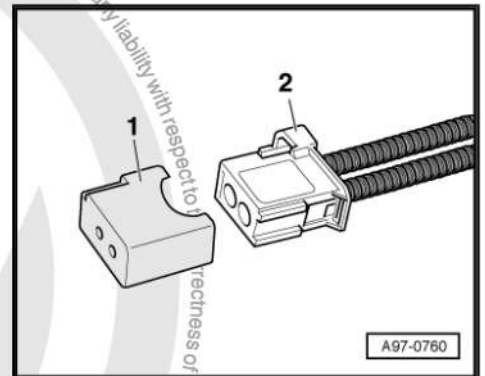
- Attach protective cap for cable-set connector - VAS 6223/9- -1- by plugging it on the connector of MOST bus -2-.
- Remove dash panel insert - KX2- from between steering wheel and dash panel.

Installing

Install in reverse order of removal.

Specified torques

- ◆ ⇒ ["1.1 Assembly overview - dash panel insert", page 59](#)





4.2 Removing and installing washer fluid reservoir



Note

The washer fluid reservoir (which is the same for the windscreen and the rear window washer systems) is located in the front left wheel housing.

- Removing and installing washer fluid reservoir ⇒ [page 77](#)

4.3 Removing and installing rear window washer pump



Note

The rear window washer pump supplies both the windscreen and the rear window washer systems; it is located on the washer fluid reservoir in the front left wheel housing.

- Removing and installing windscreen and rear window washer pump - V59- ⇒ [page 80](#) .

4.4 Removing and installing washer jet

The spray jet is installed in the high-level brake light.

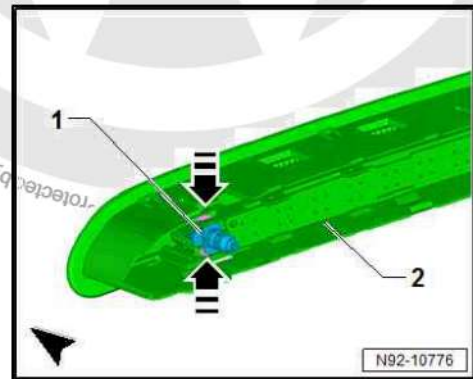
Removing

- Remove high-level brake light ⇒ [page 120](#) .
- Release the two catches -arrows-.
- Pull spray jet -1- towards rear out of high-level brake light.

Installing

Install in the reverse order of removal, observing the following:

- When connecting washer fluid line, securing clip must engage audibly in connection.
- Adjusting spray jet ⇒ [page 88](#) .



4.5 Adjusting spray jet

- Adjusting rear window washer system spray jets ⇒ Maintenance ; Booklet 45.1 ; Descriptions of work .
- If spray pattern still does not match specifications, clean soiled washer jet.

Cleaning washer jet:



Caution

Risk of damage.

- ◆ Do not use any objects for cleaning spray jets!

- Remove spray jet ⇒ [page 88](#) .



Installing

Install in the reverse order of removal, observing the following:

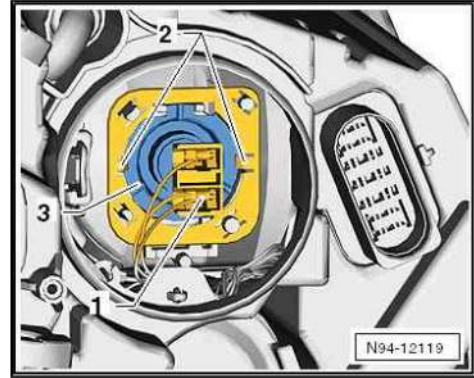
- Insert new headlight main beam bulb -3- in bulb carrier; do not touch the glass part of the bulb with bare hands.
- Catches -2- must be heard to engage.



Caution

Risk of damage to the headlight.

- ◆ *Make sure cover cap is correctly seated when installing. The ingress of water will cause permanent damage to the headlight.*

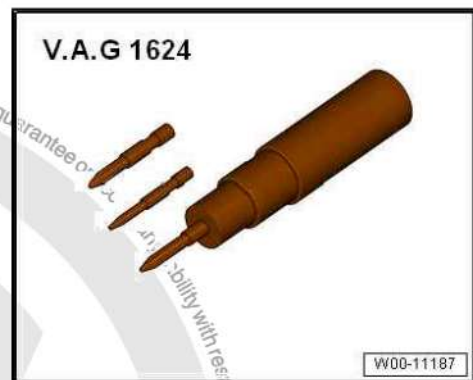


- Perform functional check.
- Check headlight adjustment ⇒ [page 97](#) .

1.12 Removing and installing daytime running light

Special tools and workshop equipment required

- ◆ Torque screwdriver - V.A.G 1624-



Note

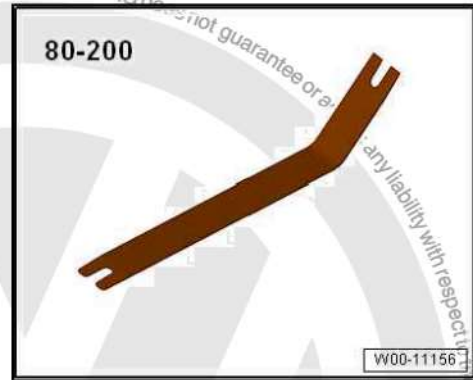
Removal and installation are described for the left side. Removal and installation on the right side are analogous.

Removing

- Switch off ignition and all electrical consumers.
- Store the ignition key outside the vehicle to prevent the ignition from being switched on unintentionally.
- Remove front left wheel housing liner ⇒ General body repairs, exterior; Rep. gr. 66 ; Wheel housing liner; Assembly overview - front wheel housing liner .



◆ Release lever - 80 - 200-

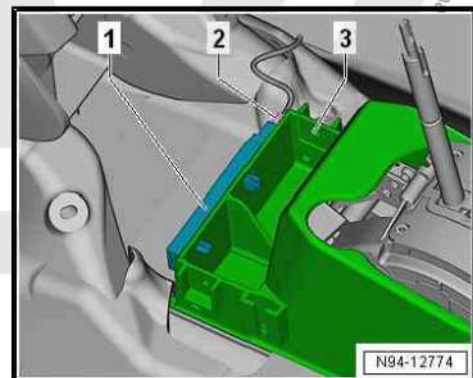


Removing

- Remove centre console trim in front footwell on front passenger side ⇒ General body repairs, interior; Rep. gr. 68 ; Centre console; Removing and installing centre console trim in front footwell .
- Working from front passenger footwell, lever interior aerial 1 for entry and start system - R138-1- off selector mechanism -3- using removal lever - 80 - 200-
- Release and disconnect electrical connector -3-.

Installing

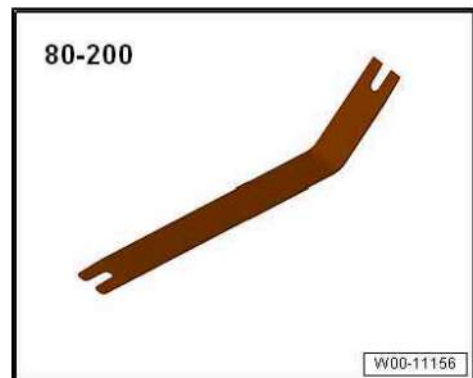
Install in reverse order of removal.



7.6 Removing and installing interior aerial 2 for entry and start system - R139-

Special tools and workshop equipment required

◆ Release lever - 80 - 200-



Removing

- Remove rear bench seat ⇒ General body repairs, interior; Rep. gr. 72 ; Rear seats; Removing and installing bench seat/ individual seats .



10 Park assist steering

⇒ "10.1 Assembly overview - park assist steering", page 156

⇒ "10.2 Removing and installing park assist steering control unit J791", page 157

⇒ "10.3 Removing and installing front senders", page 157

⇒ "10.4 Removing and installing rear senders", page 157

10.1 Assembly overview - park assist steering



Note

The illustration shows the fitting location of the park assist steering control unit - J791- for LHD vehicles. The park assist steering control unit - J791- for RHD vehicles is located behind the glove compartment on the right support for dash panel central tube.

1 - Front park assist steering senders

- Front left sender for park assist steering on left side of vehicle - G568-
- Front right sender for park assist steering on right side of vehicle - G569-
- Removing and installing ⇒ [page 157](#)

2 - Park assist steering control unit - J791-

- Removing and installing ⇒ [page 157](#)

3 - Park assist steering button - E581-

- In switch module 1 in centre console - EX23- :
- Removing and installing ⇒ [page 193](#)

4 - Rear park assist steering senders

- Rear left park assist steering sender - G716-
- Rear right park assist steering sender - G717-
- Removing and installing ⇒ [page 157](#)



N00-00000



1.10 Removing and installing interior door handle illumination bulb -L146- / -L147-



Note

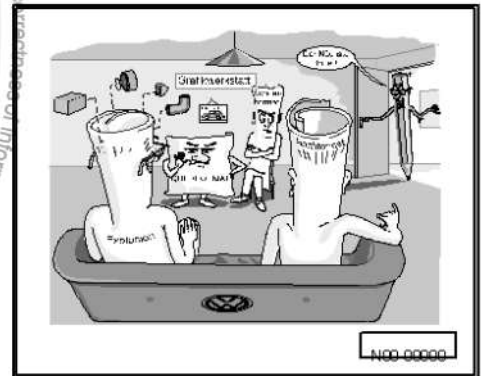
Removal and installation are described for the left side. Removal and installation on the right side are analogous.

Removing

- Remove interior door handle ⇒ General body repairs interior; Rep. gr. 70 ; Front door trims; Removing and installing interior door handle .
- Carefully release driver side door interior handle illumination bulb - L146- -2- at top and bottom -arrow-.
- Carefully pull driver side door interior handle illumination bulb - L146- -2- off light conductor -1-.

Installing

- Install in the reverse order of removal, observing the following:
- Perform functional check.



1.11 Removing and installing bulb for background lighting in front door -L164- / -L165-



Note

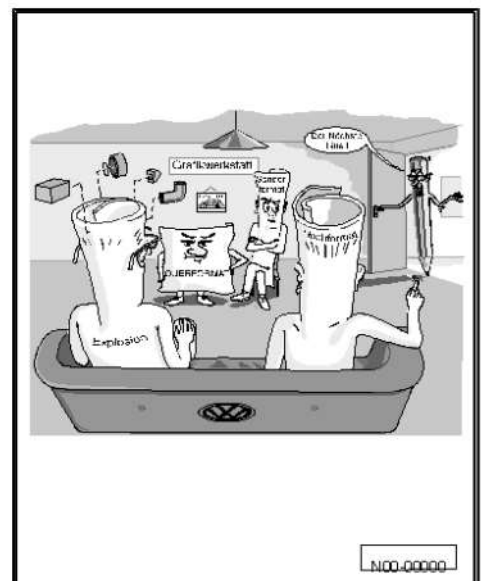
Removal and installation are described for the left side. Removal and installation on the right side are analogous.

Removing

- Remove door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Unclip electrical connector -2- from door trim.
- Release retaining lugs -3-.
- Carefully pull driver door ambient lighting bulb - L164- -1- off light conductor.

Installing

- Install in the reverse order of removal, observing the following:
- Perform functional check.





2.4 Overview of fitting locations - controls in centre console



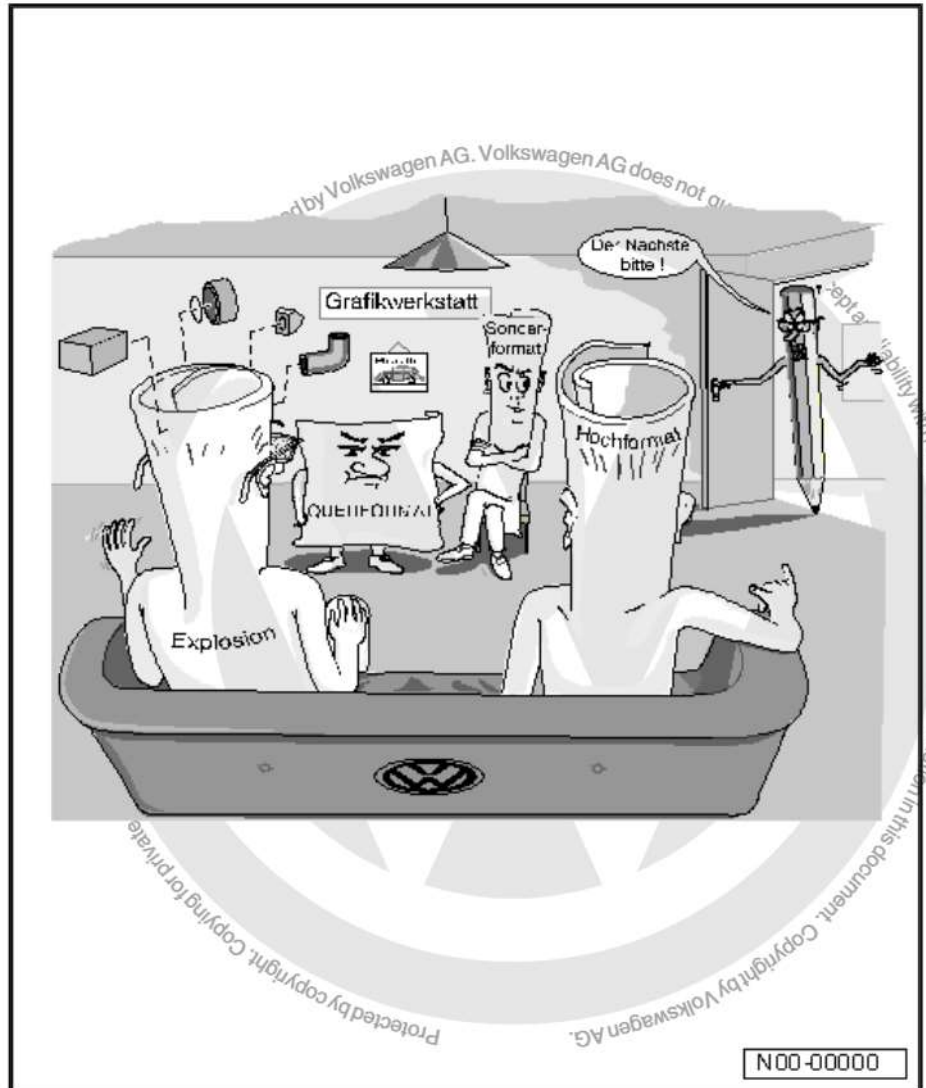
The illustration shows fitting locations for left-hand drive vehicles. Fitting locations for right-hand drive vehicles are similar.

1 - Starter button - E378-

- ❑ Removing and installing
⇒ [page 199](#)

2 - Switch module 1 in centre console - EX23-

- ❑ Depending on vehicle equipment, the following buttons may be installed:
 - ◆ TCS and ESP button - E256-
 - ◆ Parking aid button - E266-
 - ◆ Park assist steering button - E581-
 - ◆ Start/stop operation switch - E693-
 - ◆ Button for driver profile selection - E735-
- ❑ Each of the buttons is installed in the switch module and cannot be removed individually.
- ❑ Removing and installing
⇒ [page 194](#)





2.20 Removing and installing window regulator switch in front passenger door - EX27-

Note

Removal and installation are described for left-hand drive vehicles. Removal and installation for right-hand drive vehicles are similar.

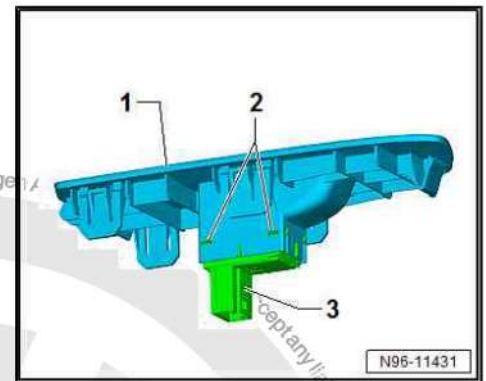
Removing

- Remove trim for switch ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trims; Assembly overview - front door trim .

Note

The trim for the switch -1- may differ from the illustration in terms of shape and appearance. The removal and installation of the window regulator switch in front passenger door - EX27- -3- is the same for all versions.

- Using a small screwdriver, release fasteners -2- on both sides.
- Pull window regulator switch in front passenger door - EX27- -3- out of trim for switch -1-.



Installing

Install in the reverse order of removal, observing the following:

- Perform functional check.

2.21 Removing and installing driver side interior locking button for central locking system - E308-

Note

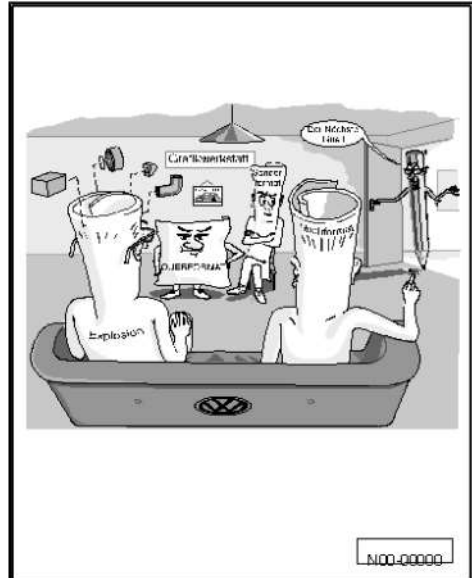
Removal and installation are described for left-hand drive vehicles. Removal and installation for right-hand drive vehicles are similar.

Removing

- Remove front door trim panel ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trim panels; Removing and installing front door trim panel .



- Release spreader clip -1- for insulation -2-, and pull it off.
- Swing insulation -2- towards centre of vehicle.
- Separate cable ties -arrows-.



- Loosen bolts -2, 3 and 6-.
- Push bracket for onboard supply control unit - J519- -1- forwards out of central tube for dash panel until centring pins -4, 5- are disengaged.
- Remove bracket for onboard supply control unit - J519- -1- together with fuse holder C - SC- towards vehicle interior.
- Pull fuse holder C - SC- out of bracket for onboard supply control unit - J519- .
- Remove electrical wiring from fuse holder C - SC- .



Note

- ◆ The exact assignment should be gleaned from the latest current flow diagram ⇒ Current flow diagrams, Electrical fault finding and Fitting locations.
- ◆ Take photographs of the assignment, if necessary.

Installing

Install in reverse order of removal.

1.7 Removing and installing fuse holder A - SA-

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-

