Installation instructions

Q4 e-tron 2022 ►
Q4 Sportback e-tron 2022 ►

Mechanically swivelling towing bracket (ECE) for package number 89A.092.157.*

Audi Genuine Accessories

Edition 02

Contents

1 General notes

Please read and take note of these WARNING, Caution and Note descriptions before carrying out maintenance or repair work.

> ⚠ ***WARNING***
>
> ***Text with this symbol contains information concerning your safety and indicates potential accident and injury risks.***

Caution

Text with this symbol indicates the risk of damage to your vehicle.

Note

Text with this symbol contains additional information.

Caution

Towing mode places increased demands on the cooling system.

Special tools are required for assembly. Improper installation can cause damage to the vehicle or the add-on parts.

> ⚠ ***WARNING***
>
> **For safety reasons, the towing bracket must only be fitted by skilled personnel – risk of accident!**
>
> **Additional modifications may be required – risk of accident. Detailed information can be found in these installation instructions.**

AUDI AG shall not accept responsibility in the event of failure to comply with these installation instructions.

2 Safety instructions for pyrotechnical, electrical and mechanical components of the restraint system

2.1 General safety instructions

Pyrotechnical components comprise:

- Airbag units
- Belt tensioners
- Belt force limiters
- Battery disconnecting elements

General

- Testing, installation and maintenance tasks must only be carried out by trained personnel.
- There are no replacement intervals for airbag units.
- Do not check using circuit tester, voltmeter, or ohmmeter under any circumstances.
- Pyrotechnic components must only be checked when installed and using ⇒ vehicle diagnostic testers that have been approved by the manufacturer.
- When working on pyrotechnic components and the airbag control unit -J234-, the battery earth wire must be disconnected when the IGNITION is SWITCHED ON. The battery negative terminal must subsequently be covered.
- You must wait ten seconds after the battery -A- has been disconnected.
- The battery -A- must be connected when the IGNITION is SWITCHED ON. There must not be anybody inside the vehicle during this process. Exception: vehicles with battery -A- located inside the vehicle. Do not sit within the airbag and seat belt deployment range.
- Observe the appropriate steps after connecting the battery -A- ⇒Page 32.
- Before performing any work on pyrotechnic components in the restraint system, e.g. before disconnecting the electrical connector, the mechanic carrying out the task must discharge any static electricity. Electrostatic discharging can be performed by touching earthed metal parts, e.g. by briefly touching the door striker plate.
- Wash hands after touching ignited pyrotechnical components of the restraint system.
- Pyrotechnical components must neither be opened nor repaired. New parts must always be used (risk of injury).
- Pyrotechnic components that have fallen onto a hard surface or that show any sign of damage must not be installed.

- Pyrotechnic components must be installed immediately after they are removed from the transport container.
- If work is interrupted, the pyrotechnic component must be returned to the transport container.
- Pyrotechnic components must not be left unattended.
- When connecting the pyrotechnic components in the restraint system, only the person performing the work may be inside the vehicle.
- Pyrotechnic components must not be treated with grease, cleaning agents or similar products.
- If the fabric becomes contaminated with substances such as oil, grease, paint, colour or solvents, the airbag unit must be replaced.
- In addition, pyrotechnic components must not be exposed to temperatures above 100°C, even for short periods.

2.2 Storing, transporting and disposing of airbag, belt tensioner and battery disconnector units (pyrotechnic components)

- Storage is subject to the applicable national legislation.
- Transportation is subject to national and international laws governing packaging, naming, labelling and accompanying documentation.
- Pyrotechnic components that have not been ignited must be returned in the original packaging for appropriate recycling in line with the applicable national legislation! Contact your importer if you have any questions.
- Only pyrotechnic components that have been completely ignited may be disposed of as industrial waste.

> ⚠ ***WARNING***
>
> ***This does not apply for belt tensioners that operate according to the Wankel tensioner principle. Tensioners of this kind should be handled in the same way as pyrotechnic components that have not been ignited (e.g. airbags).***
>
> ***Background: For belt tensioners that operate according to the Wankel tensioner principle, it is not possible to check whether all ignition stages have completed using workshop tools.***

3 Notes on towing bracket — Fitting and operation

Towing vehicle

Manufacturer:	AUDI AG
Model:	Q4 e-tron 2022 ►, Q4 Sportback e-tron 2022 ►
Offic. Type designation:	FZ, F4

Maximum trailer weight or trailer drawbar load in kg, as specified by the manufacturer for the above-named vehicle model: ⇒ Vehicle registration certificate/Owner's Manual.

Towing bracket

Technical data	
ACPS no.:	1007 2512
Audi no.:	11A.803.881.D
ECE No.:	55R-01 2889
D-value:	9.7 kN
Perm. drawbar load:	75 kg

Technical data	
ACPS no.:	1007 5102
Audi no.:	11A.803.881.F, 11A.803.881.G, 11A.803.881.H
ECE No.:	55R-01 2889
D-value:	9.7 kN
Perm. drawbar load:	75 kg

Technical data	
ACPS no.:	1008 3230
Audi no.:	11A.803.881.J, 11A.803.881.L
ECE No.:	55R-01 2889
D-value:	10,9 kN
Perm. drawbar load:	75 kg

⚠ ***WARNING***

The drawbar load figures specified on the type plate of the towing bracket are test values only. Vehicle-specific figures are often lower than these values and can be found in the vehicle documents.

Please see your vehicle documents for your maximum trailer weight.

> ⚠ ***WARNING***
>
> ***Do not exceed the verified D-value and the permitted trailer drawbar load – risk of accident!***

The towing bracket is intended for towing trailers fitted with a tow ball and for operating carriers suitable for mounting to the coupling ball.

Nationally applicable regulations must be adhered to in EU and non-EU countries.

Improper use is prohibited.

Use is only permitted under favourable road conditions and must be adapted to road conditions.

3.1 Assembly

> ⚠ ***WARNING***
>
> ***For safety reasons, the towing bracket must only be fitted by skilled personnel – risk of accident!***
>
> - ***If replacement parts are required, these must only be installed by skilled personnel and to undamaged genuine parts – risk of accident!***
> - ***Installation must be in line with AUDI AG/Volkswagen AG guidelines – risk of accident!***
> - ***Modification of the towing bracket is prohibited. This will invalidate the type approval – risk of accident and legal implications!***
> - ***Use of the mounting points approved as standard by the vehicle manufacturer is mandatory – risk of accident!***

– Remove underbody sealing, body cavity sealant (wax) or insulation material from the area around the contact surfaces of the towing bracket with the vehicle.

– In order to provide adequate corrosion protection to bare metal body parts, apply the following products with a brush.

- Single-component primer surfacer LGF.008.001.42/43
- Two-component HS vario surfacer LGF.786.004.A4
- Paint to match the vehicle colour
- Body cavity preserving agent D.330.KD2.A1

3.2 Operation

⚠ ***WARNING***

Vehicle handling is affected by the use of towing mode; increased driver awareness is required – risk of accident!

- ***Read the notes in the "Towing mode" chapter of the ⇒ Owner's Manual – risk of accident!***
- ***If you are using trailer stabilisers, the coupling ball must be free from grease. Read and observe the notes in the relevant Owner's Manuals – risk of accident!***

The diameter of the ball coupling must be checked at regular intervals.

- ***For safety reasons, use of the towing bracket must be discontinued if the diameter reaches 49 mm at any point. If this situation occurs, contact a qualified workshop – risk of accident!***

For safety reasons, you are advised to swivel the ball rod inwards when not in use – risk of accident!

Do not tow using the eye – risk of breakage!

When swivelling into position and to protect against contamination of the ball rod, a ball protection cap can be fitted to the ball coupling.

Note

- *The towing bracket including all assembly parts weighs approx. 25 kg.*
- *Please note that the kerb weight of your vehicle will increase by this amount once the towing bracket is fitted.*
- *Please make sure that you do not exceed the gross vehicle weight rating for your vehicle.*

Note

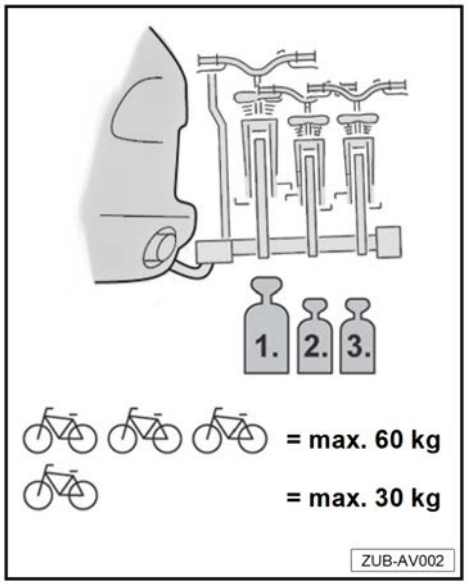
Use the towing bracket when towing.

3.3 Bicycle carrier safety instructions

⚠ ***WARNING***

The bicycle carrier for the trailer towing coupling is only suitable for transporting bicycles – risk of accident!

- ***The bicycle carrier for the towing bracket must only be used to transport bicycles with a total weight of max. 60 kg (132 lb). When carrying bicycles, the distance from the end of the vehicle to the last bicycle must not exceed 60 cm.***
- ***The bicycle carrier for trailer towing coupling is not suitable for off-road use.***
- ***Do not under any circumstances exceed the maximum load of the bicycle carrier for trailer towing coupling or the drawbar load of the trailer towing coupling.***
- ***The combined weight of the towing bracket bicycle carrier and bicycles must not exceed the gross vehicle weight rating or the gross axle weight rating of the vehicle (⇒ owner's manual).***



3.4 Sensitivity to side winds: safety instructions

⚠ ***WARNING***

The load affects driving and braking behaviour and the vehicle's sensitivity to side winds. Adapt your driving style accordingly – risk of accident!

When driving in strong side winds, make sure that you take extra care:

- ***When moving into and out of the slipstreams of lorries,***
- ***When driving past hedgerows, trees, walls and buildings as well as any other wind barriers,***
- ***When driving over bridges.***

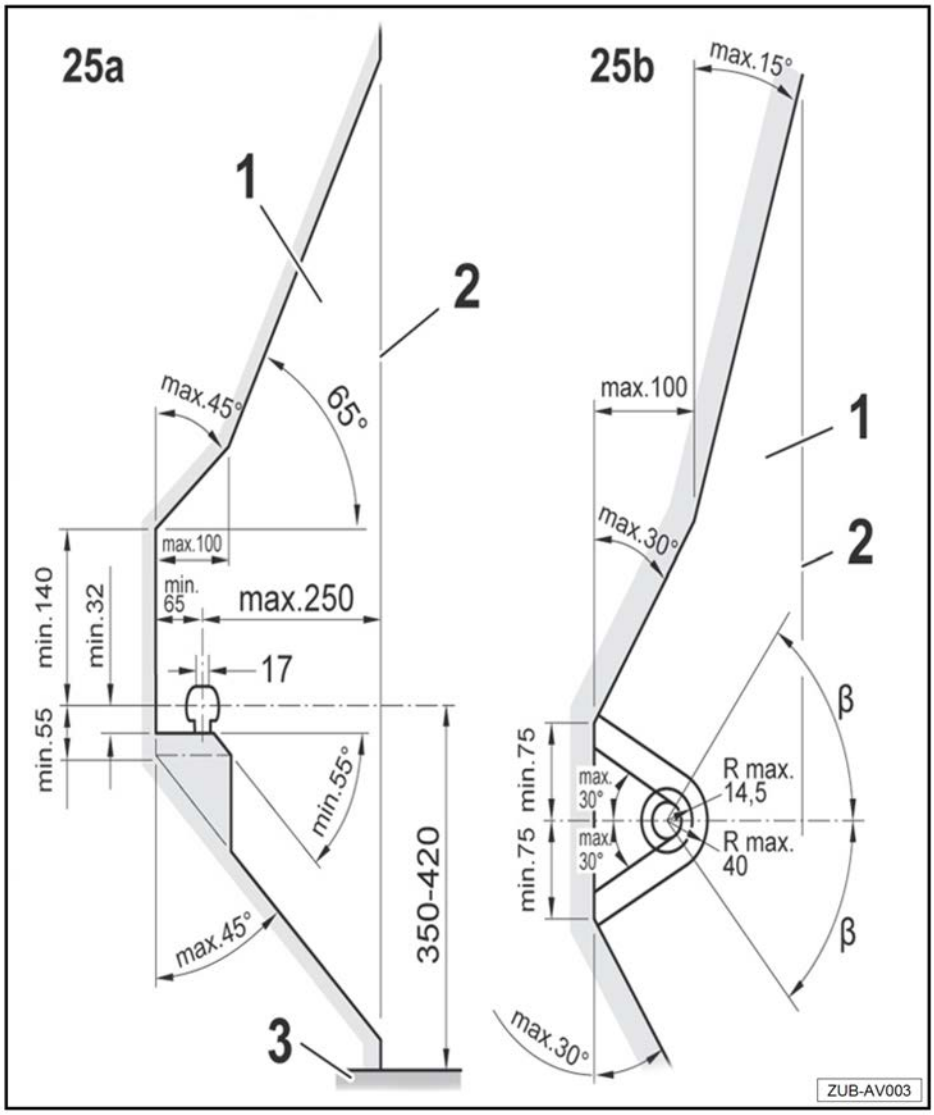
3.5 Notes concerning ECE-R 55 mechanical coupling device guidelines

Make sure that clearance is provided in compliance with appendix 7, Figure 25a and 25b of the guideline ECE-R 55.

1 - Clearance

2 - Vertical plane through the end points of the vehicle's overall length

3 - Ground



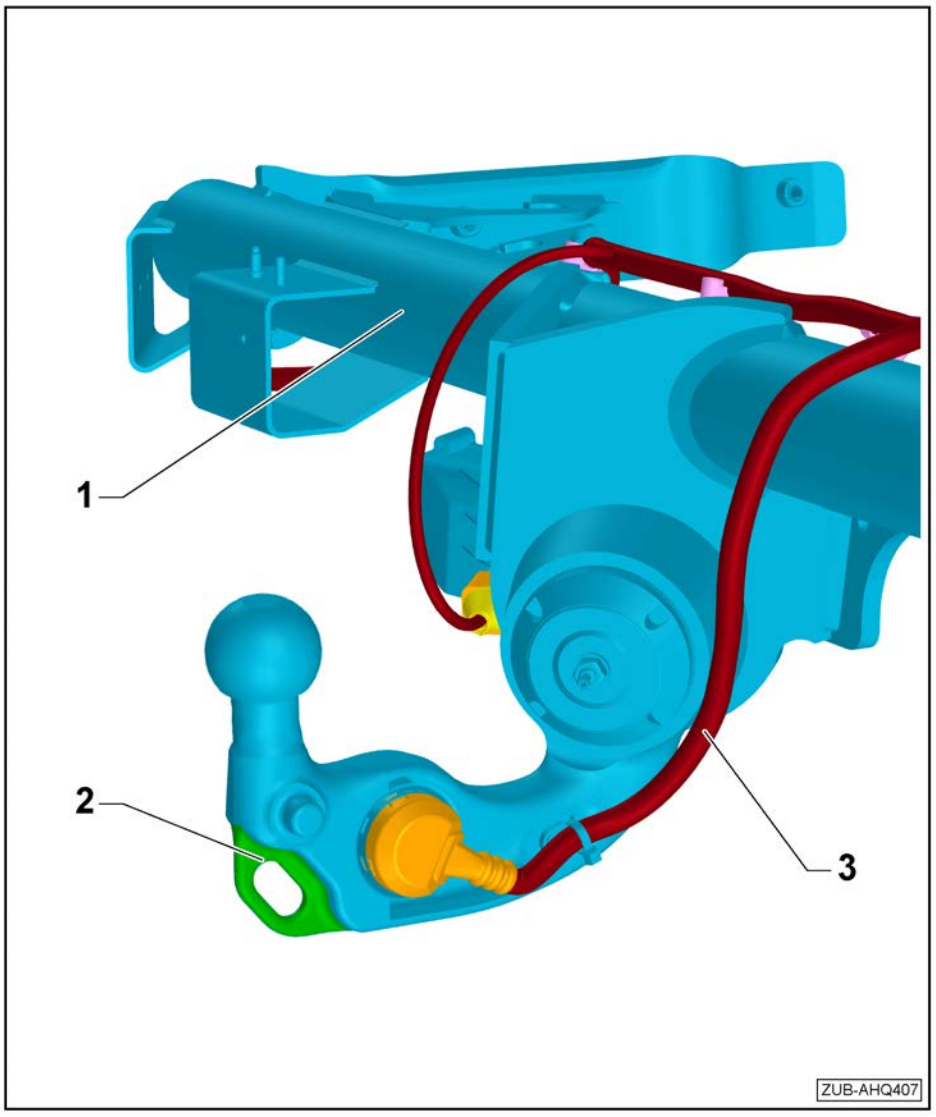
3.6 Towing bracket

1 - Cross member with towing bracket

2 - Eye

- ❑ for the brake cable

3 - Retrofit wiring harness with trailer socket



4 Overview of components

4.1 Overview of mechanical components

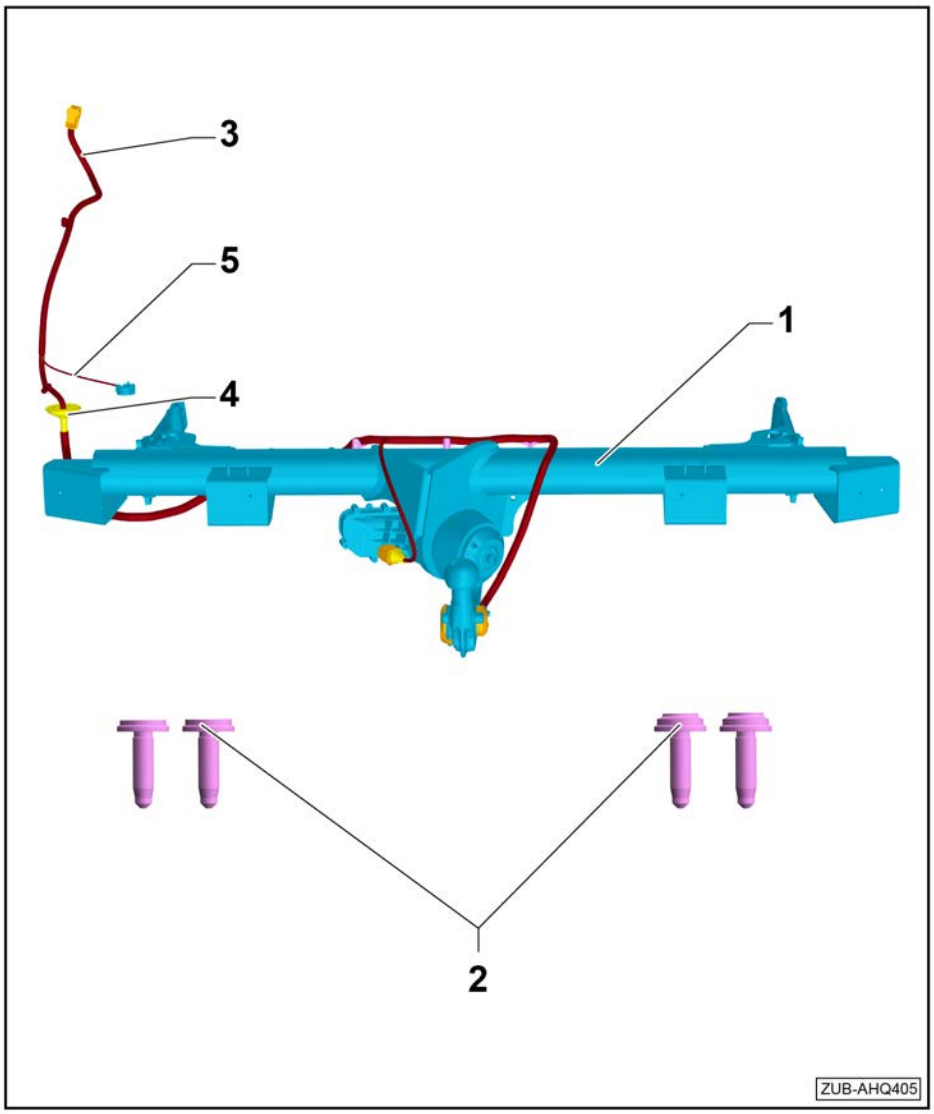
1 - Towing bracket with swivelling cross member including socket/electrical release wiring harness
- ❑ 1x

2 - Securing bolts for towing bracket
- ❑ M10 x 40
- ❑ 50 Nm + 180°
- ❑ 4x

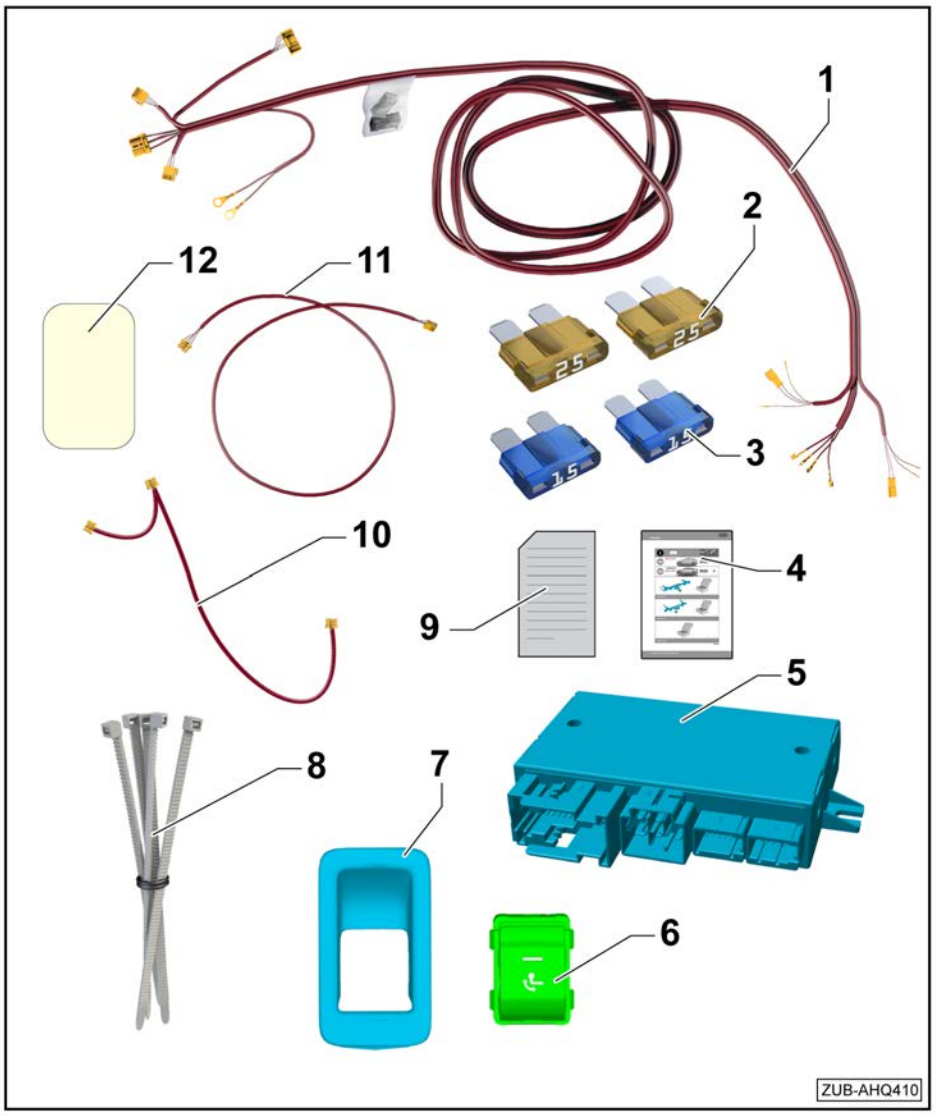
3 - Electrical connection
- ❑ Socket/electrical release retrofit wiring harness
- ❑ 1x

4 - Grommet for lead-through
- ❑ 1x

5 - Earth connection
- ❑ 1x



4.2 Overview of electrical system components



1 - Onboard supply retrofit wiring harness with PE bag
- ❑ In PE bag: 1x black three-pin connector housing
- ❑ In PE bag: 1x white three-pin connector housing
- ❑ 1x

2 - 15 A fuse
- ❑ 2x

3 - 25 A fuse
- ❑ 2x

4 - Information sheet
- ❑ 1x

5 - Fitting trailer detector control unit -J345-
- ❑ With mounting equipment for mounting
- ❑ 1x

6 - Towing bracket electrical release button
- ❑ 1x

7 - Frame for towing bracket electrical release button
- ❑ 1x

8 - Cable ties
- ❑ 10x

9 - Activation document
- ❑ 1x

10 - Wiring harness for left-hand towing bracket electrical release button
- ❑ 1x

11 - Wiring harness extension for right-hand towing bracket electrical release button

12 - Adhesive pad

4.3 Additional required parts

Note

Any additional required parts for the various vehicle variants can be found in the ⇒ electronic parts catalogue ETKA

Applies to all vehicles without preparation (1D0) with PR no. combination: NI1/NI9.

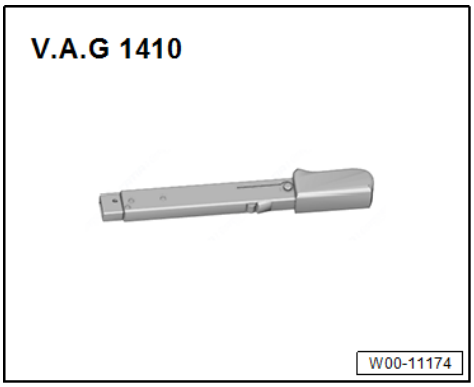
CAN retrofit wiring harness 8Y0.055.307.A for left-hand-drive vehicles

CAN retrofit wiring harness 8Y0.055.307 for right-hand-drive vehicles

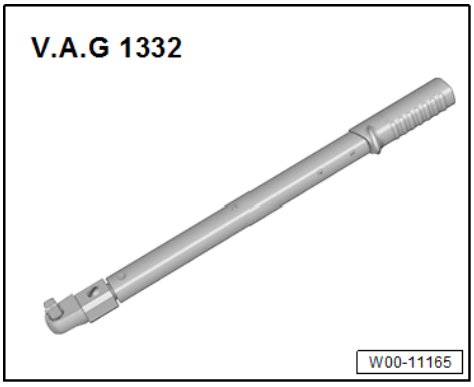
5 Mechanical preparation

Required special tools, testing instruments, measuring instruments and auxiliary devices

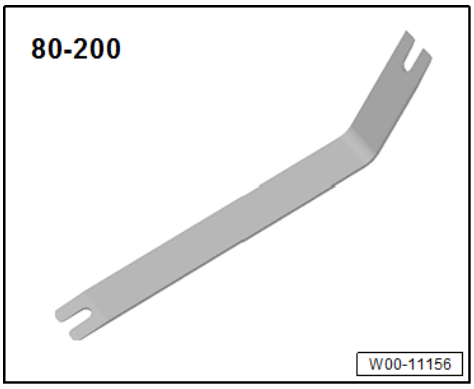
- Torque wrench -V.A.G 1410-



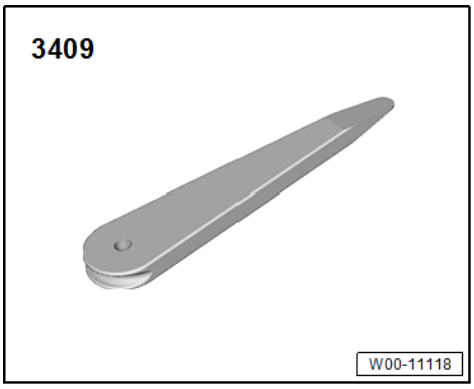
- Torque wrench -V.A.G 1332-



- Removal lever -80 - 200-



- Wedge -3409-



5.1 Disconnecting the battery

Disconnect the battery ⇒Electrical system; Rep. gr. 27; Battery; Disconnecting and connecting the battery

> ⚠ ***WARNING***
>
> - ***Always make sure that the vehicle's electrical system is protected by disconnecting the battery before performing work on the electrical system.***
> - ***Only unscrew the battery negative terminal (-) of the battery.***
> - ***The battery positive terminal (+) of the battery must only be unscrewed once the battery has been removed from the vehicle.***

5.2 Remove the following components

Assembly overview of bench seat ⇒General body repairs, interior; Rep. gr. 72; Rear seat; Assembly overview — bench seat/individual seats

Remove the bench seat ⇒General body repairs, interior; Rep. gr. 72; Rear seats; Installing and removing the bench seat/individual seats

Remove the rear seat backrest ⇒General body repairs, interior; Rep. gr. 72; Rear seats; Installing and removing the rear seat backrest

Remove the luggage compartment floor mat ⇒General body repairs, Interior; Rep. gr. 70; Luggage compartment trims; Removing and installing the luggage compartment floor

Remove the rear lid lock trim ⇒General body repairs, interior; Rep. gr. 70; Luggage compartment trim; Removing and installing the rear lid lock trim

Remove the rear shelf ⇒General body repairs, interior; Rep. gr. 70; Interior trims; Removing and installing the rear shelf

Assembly overview of luggage compartment side trim ⇒General body repairs, interior; Rep. gr. 70; Luggage compartment trims; Assembly overview of luggage compartment side trim

Remove the left and right luggage compartment lights ⇒Electrical system ; Rep. gr. 96; Lights; Removing and installing the left and right luggage compartment lights -W3-

Remove the fastening rings ⇒General body repairs, Interior; Rep. gr. 70; Luggage compartment trims; Removing and installing the fastening rings

Remove the left-hand support for luggage compartment floor ⇒General body repairs, interior; Rep. gr. 70; Luggage compartment trims; Removing and installing the support for the luggage compartment floor

Remove the left-hand luggage compartment side trim ⇒General body repairs, interior; Rep. gr. 70; Luggage compartment trims; Removing and installing the luggage compartment side trim

Remove the right-hand luggage compartment side trim ⇒General body repairs, interior; Rep. gr. 70; Luggage compartment trims; Removing and installing the right-hand luggage compartment side trim

Remove rear bumper cover ⇒General body repairs, exterior; Rep. gr. 63; Rear bumper; Removing and installing the bumper

Replacing the LTE antenna on the impact bar

Remove the impact bar ⇒General body repairs, exterior; Rep. gr. 63; Rear bumper; Removing and installing the impact bar

Remove the dash panel cover ⇒General body repairs, interior; Rep. gr. 70; Interior trims; Removing and installing the dash panel cover on the driver side

Remove the gap cover on the A-pillar ⇒General body repairs, interior; Rep. gr. 70; Interior trims; Removing and installing the gap cover on the A-pillar

Remove the bonnet actuating lever ⇒General body repairs, interior; Rep. gr. 70; Interior trims; Removing and installing the bonnet actuating lever

Remove the front left-hand sill panel trim ⇒General body repairs, interior; Rep. gr. 70; Interior trims; Removing and installing the sill panel trim

Remove the bottom left-hand section of the A-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the A-pillar trim

Remove the top left-hand section of the B-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the B-pillar trim

Remove the bottom left-hand section of the B-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the B-pillar trim

Remove the rear left-hand sill panel trim ⇒General body repairs, interior; Rep. gr. 70; Interior trims; Removing and installing the sill panel trim

Remove the top left-hand section of the C-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the C-pillar trim

Remove the bottom left-hand section of the C-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the C-pillar trim

Remove the front left-hand belt end anchor ⇒General body repairs, interior; Rep. gr. 69; Seat belts; Removing and installing the front belt end anchor

Remove the glove compartment ⇒General body repairs, interior; Rep. gr. 68; Glove compartment; Removing and installing the glove compartment

Applies to left-hand drive vehicles with separate CAN wire 8Y0.055.307.A

Remove the front right-hand sill panel trim ⇒General body repairs, interior; Rep. gr. 70; Interior trims; Removing and installing the sill panel trim

Remove the bottom right-hand section of the A-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the A-pillar trim

Remove the top right-hand section of the B-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the B-pillar trim

Remove the bottom right-hand section of the B-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the B-pillar trim

Remove the rear right-hand sill panel trim ⇒General body repairs, interior; Rep. gr. 70; Interior trims; Removing and installing the sill panel trim

Remove the top right-hand section of the C-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the C-pillar trim

Remove the bottom right-hand section of the C-pillar trim ⇒General body repairs, interior; Rep. gr. 70; Interior trim; Removing and installing the C-pillar trim

Remove the front right-hand belt end anchor ⇒General body repairs, interior; Rep. gr. 69; Seat belts; Removing and installing the front belt end anchor

Remove the glove compartment ⇒General body repairs, interior; Rep. gr. 68; Glove compartment; Removing and installing the glove compartment

6 Assembly overview and tightening torques

Assembly overview of towing bracket with cross member
⇒ **"Assembly overview of towing bracket with cross member" on page 16**

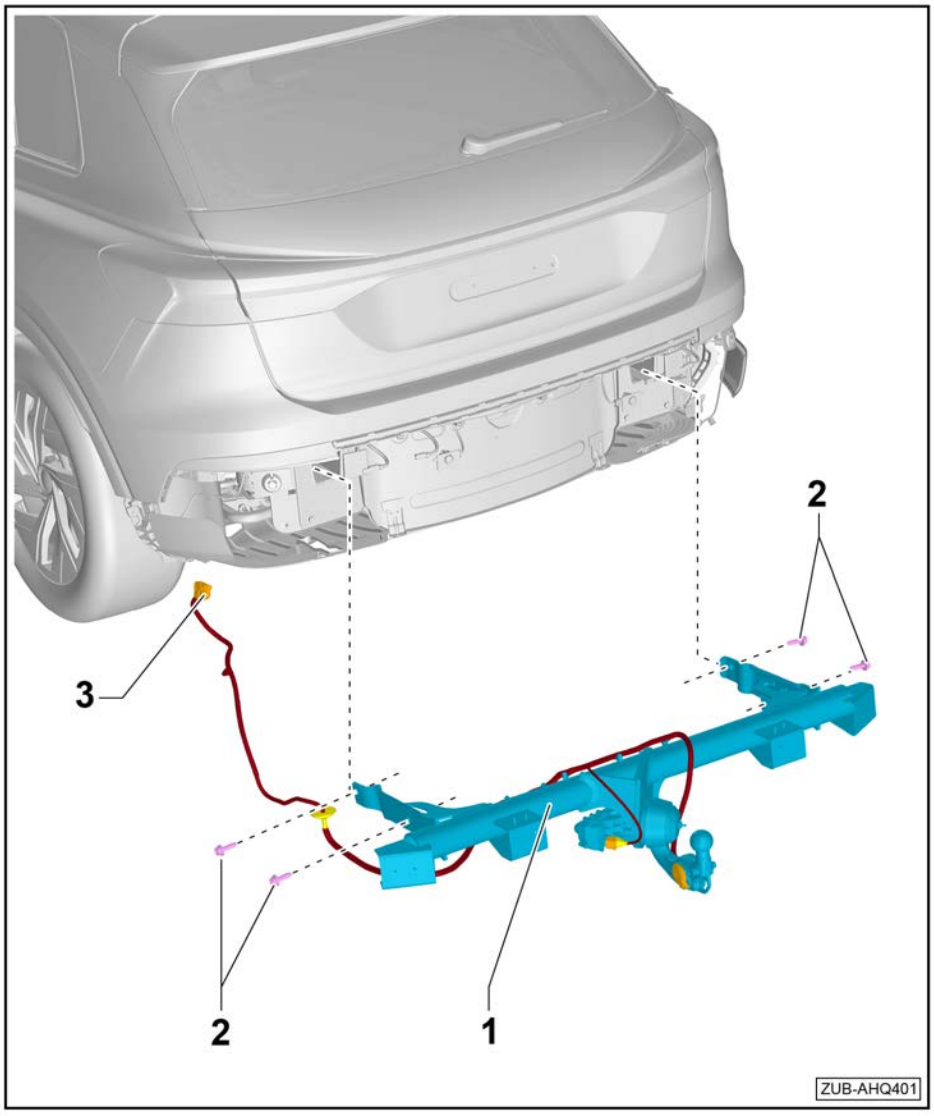
Assembly overview of cockpit electrics ⇒ **"Assembly overview of the electrics" on page 17**

6.1 Assembly overview of towing bracket with cross member

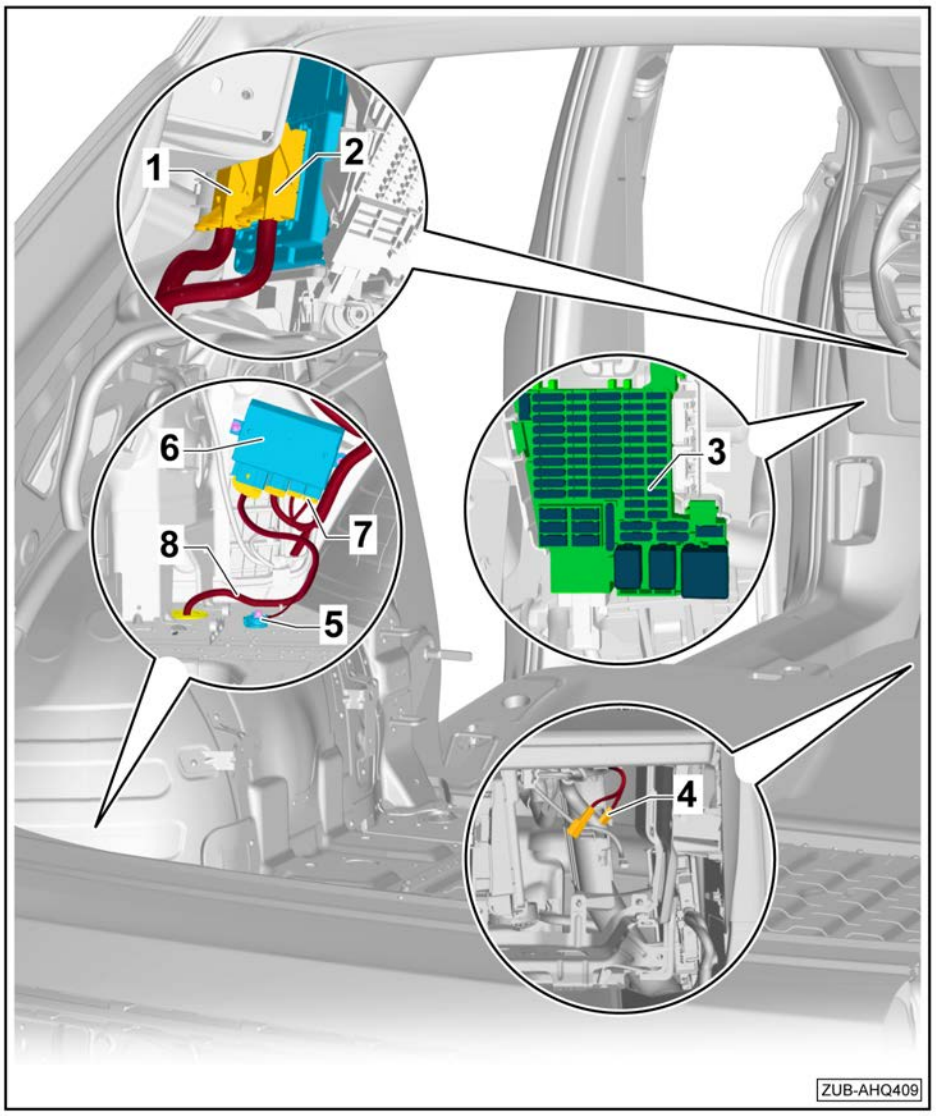
1 - Trailer towing coupling with cross member
- ❑ Assembly ⇒ Page 18

2 - Securing bolts
- ❑ M10 x 40
- ❑ 50 Nm + 180°
- ❑ 4x
- ❑ Replace after removal

3 - Electrical connection
- ❑ "Socket/electrical release" wiring harness



6.2 Assembly overview of the electrics



1 - Connector A on the on-board supply control unit -J519-
- ❑ CAN bus connection
- ❑ Terminal 15

2 - Connector C on the on-board supply control unit -J519-
- ❑ Brake light connection

3 - Relay and fuse carrier
- ❑ On the holder for the on-board supply control unit -J519- behind the shelf on the driver side

4 - CAN separation point in glove compartment
- ❑ Applies to vehicles with 1D7

5 - Wiring connection for earth point on left in luggage compartment

6 - Fitting trailer detector control unit -J345-

7 - Routing the on-board supply retrofit wiring harness towards the trailer detector control unit -J345-

8 - Routing the socket retrofit wiring harness towards the trailer detector control unit -J345-

6.3 Sealing threaded holes in the impact damper

Special tools and workshop equipment required

- Cartridge gun for bodywork sealant
- Bodywork sealant

Sealing threaded holes

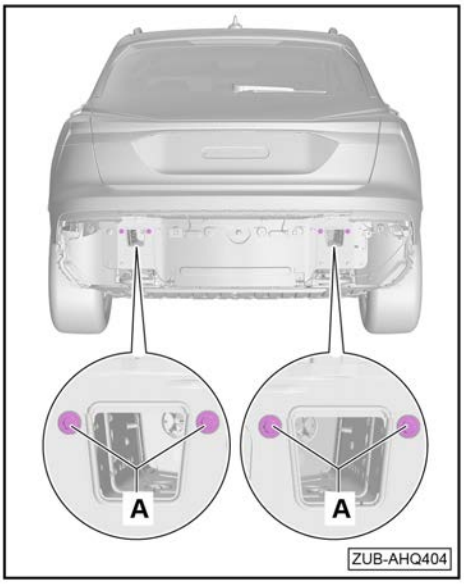
Caution

Threaded holes must be sealed using a suitable bodywork sealant to prevent any moisture from entering them.

– Apply bodywork sealant to the securing bolts -A- of the impact bar and screw into the threaded holes.

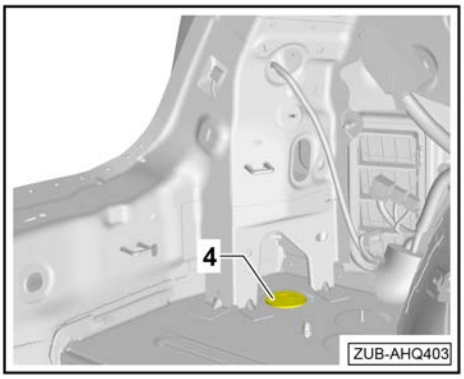
– Tighten the securing bolts -A- of the impact bar to the correct torque.

Component	Nm
Securing bolts -A-	20



6.4 Fitting the towing bracket

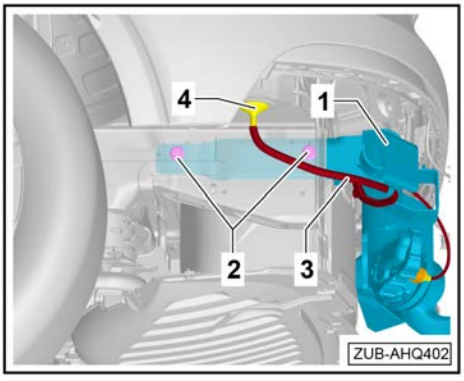
– Remove sealing plugs -4-.



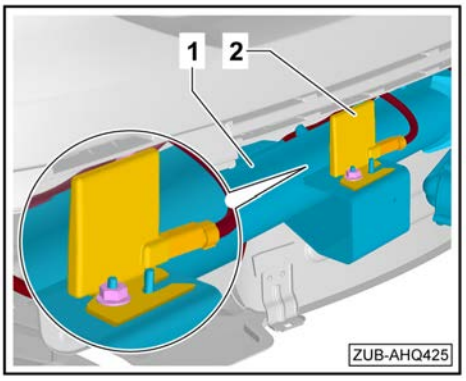
– With the help of a second mechanic, insert the trailer towing coupling with cross member -2- into the ends of the frame.

– Feed the line for the trailer detector control unit -J345- -3- through the opening and insert the grommet -4-.

– Insert the left and right bolts -2- for securing the towing bracket -1- and tighten to the required torque ⇒Page 16.



– Screw the LTE antenna -2- onto the towing bracket -1-, note the position of the LTE antenna -2- in the image -magnifying glass-.



7 Electrical connection

7.1 Installing the trailer detector control unit J345

The trailer detection control unit -J345- must be installed on all vehicles.

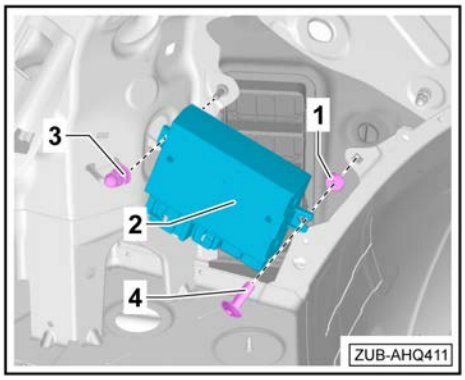
Preparatory work

- The battery has been disconnected.
- The left-hand luggage compartment side trim has been removed.

– Insert expanding nut N.106.213.01 -1- into the opening on the right of the wheel housing extension.

– If necessary, loosen the nut -3- of the left-hand welding stud. If no nut is fitted, use the supplied nut.

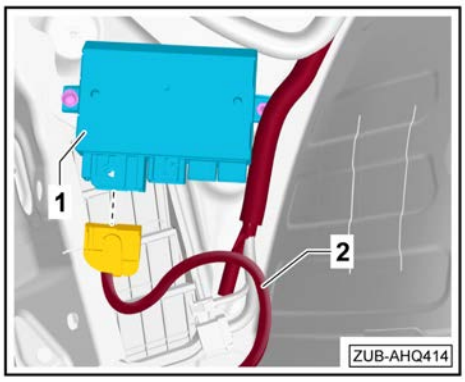
– Position the trailer detector control unit -J345- -2- and secure it on the left with the nut -3- and on the right with screw N.909.059.02 -4-, tightening to the required torque.



Component	Nm
Screw -4-	2.5
Nut -3-	6

7.2 Connecting the towing bracket connector for the socket/electrical release to trailer detector control unit J345

– Connect the towing bracket connector for the socket/electrical release -2- into the trailer detector control unit -J345- -1- and fasten using the white bracket.



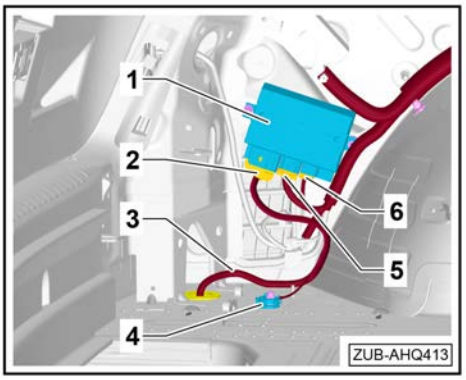
Note

Fix any excess wire lengths in position with a cable tie to prevent noise.

7.3 Installing the onboard supply retrofit wiring harness

The “on-board supply” retrofit wiring harness is only installed on vehicles without the preparation (1D0) for towing brackets.

Installation



- Route the on-board supply retrofit wiring harness -3- along the standard wiring harness to the trailer detector control unit -J345- -1- and connect connectors -5 and 6- on the retrofit wiring harness.
- Establish the earth connection -4-.
- Secure the retrofit wiring harness -3- to the standard wiring harness using cable ties.

The wires must be secured with cable ties to stop them from “slipping” or “wearing”.

Applies to left-hand-drive vehicles

- Route the retrofit wiring harness -3- along the standard wiring harness to the relay and fuse carrier behind the shelf on the driver side.
- Route CAN wire 8Y0.055.307.A along the standard wiring harness to the data bus diagnostic interface -J533- behind the glove compartment.
- Secure both wiring harnesses to the standard wiring harness using cable ties.

Applies to right-hand-drive vehicles

- Route the retrofit wiring harness -3- along the standard wiring harness to the relay and fuse carrier behind the shelf on the driver side.
- Route CAN wire 8Y0.055.307 along the standard wiring harness to the data bus diagnostic interface -J533- behind the glove compartment.
- Secure both wiring harnesses to the standard wiring harness using cable ties.

Notes on further installation

Earth point tightening torque: 9 Nm

Note

For vehicles with preparation 1D7, connectors -5 and 6- on the preparation wiring harness must be connected.

7.4 Inserting the fuses into the relay and fuse carrier

Applies to vehicles with preparation (1D7)

– Insert the fuses into the relay and fuse carrier -1-.

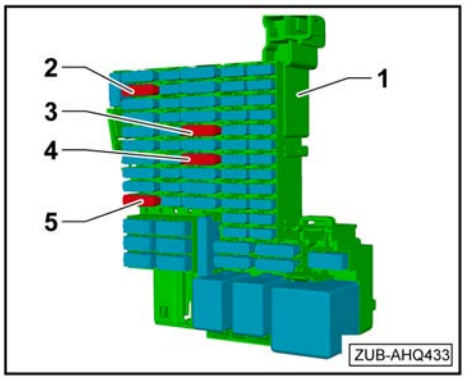
– If required, insert the fuses as follows:

Fuse location F03 (2) - Fuse: 25 A

Fuse location F29 (3) - Fuse: 15 A

Fuse location F31 (4) - Fuse: 25 A

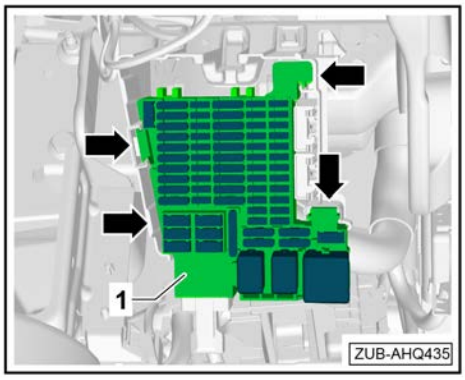
Fuse location F11 (5) - Fuse: 15 A



7.5 Removing the relay and fuse carrier

Applies to vehicles without preparation (1D0)

– Press the spring catches -arrows- and remove the relay and fuse carrier -1- from the bracket.



7.6 Establishing the power supply to terminal 30

Applies to vehicles without preparation (1D0)

Terminal 30 is supplied directly via the relay and fuse carrier -1-.

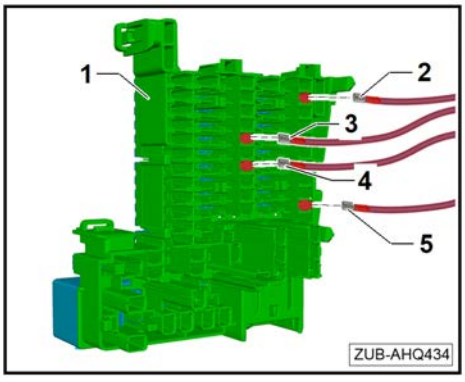
– Insert the following list of wires from the retrofit wiring harness into the respective slots on the relay and fuse carrier -1-, making sure that the wires click into place.

Red/black wire (2) - Slot 03A

Red/green wire (3) - Slot 29A

Red/blue wire (4) - Slot 31A

Red wire (5) - Slot 11A



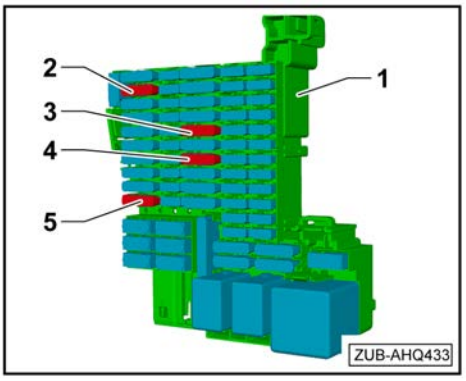
– Insert the fuses into the relay and fuse carrier -1-.

Fuse location F03 (2) - Fuse: 25 A

Fuse location F29 (3) - Fuse: 15 A

Fuse location F31 (4) - Fuse: 25 A

Fuse location F11 (5) - Fuse: 15 A



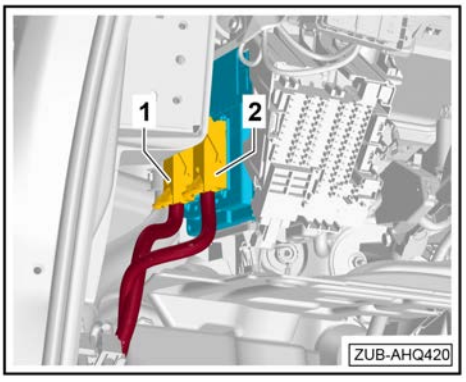
7.7 Connecting terminal 15/brake light signal

Applies to left-hand-drive and right-hand-drive vehicles without preparation (1D0)

Terminal 15/the brake light signal is connected at the onboard supply control unit -J519- behind the dash panel cover on the driver side on left-hand-drive vehicles/behind the glove compartment on right-hand-drive vehicles. Connectors A and C on the on-board supply control unit -J519- are used.

Installing the wire for terminal 15 (connector A)

– Release and disconnect connector A -1- on the onboard supply control unit -J519-.



– Open the connector housing and unpin contact 14.

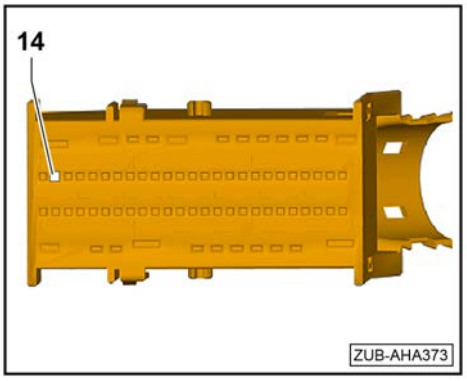
– Pin the corresponding contact of the retrofit wiring harness (Y-wires) into connector A.

◆ Pin 14: terminal 15, black/violet

– Pin contact 14 from connector A into the loose black 3-pin contact housing.

Pin 1 - Terminal 15, black/violet

– Connect the black 3-pin contact housing that was just pinned to the black 3-pin connector housing on the retrofit harness.

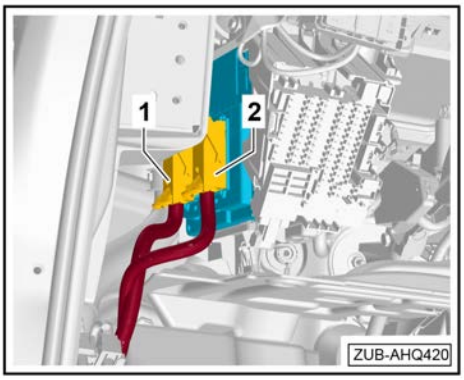


NOTICE

For right-hand-drive vehicles without preparation (1D0), an additional wire is inserted into the two empty pins 2 and 3 to connect the CAN. See ⇒Page 25

Installing the wire for the brake light signal (connector C)

– Release and disconnect connector C -2- on the onboard supply control unit -J519-.



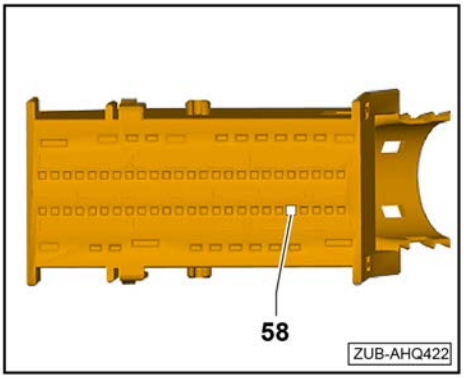
– Open the connector housing and unpin contact 58.

– Pin the corresponding contact of the retrofit wiring harness (Y-wire) into connector C.

◆ Pin 58: brake light, black/red

– Pin contact 58 from connector C into chamber 2 on the loose white 3-pin connector housing.

– Connect the white three-pin contact housing that was just pinned to the white three-pin connector housing on the retrofit wiring harness.



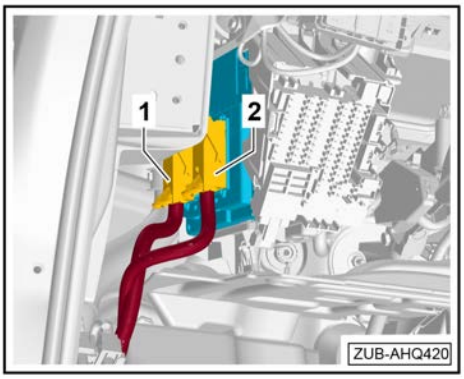
7.8 Connecting the CAN bus

Applies to retrofit package 89A.092.157; 89A.092.157.B for left-hand-drive and right-hand-drive vehicles without preparation (1D0) with PR no.: without NI1/NI9

The CAN bus is connected at the onboard supply control unit -J519- behind the dash panel cover on the driver side on left-hand-drive vehicles/behind the glove compartment on right-hand-drive vehicles. Connector A is used on the onboard supply control unit -J519-.

Installing the wire for the CAN bus (connector A)

– Release and disconnect connector A -1- on the onboard supply control unit -J519-.



– Open the connector housing and unpin contacts 16 and 17.
– Pin the corresponding contacts of the retrofit wiring harness (Y-wire) into connector A.

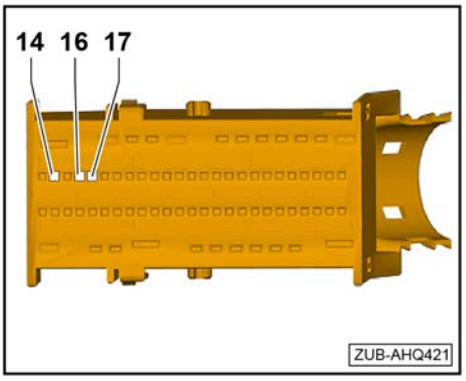
◆ Pin 16: CAN bus (CAN High), green

◆ Pin 17: CAN bus (CAN Low), orange/brown

– Pin contacts 16 and 17 from connector A into the loose black 3-pin contact housing.

Pin 2 - CAN bus (CAN High), green

Pin 3 - CAN bus (CAN Low), orange/brown

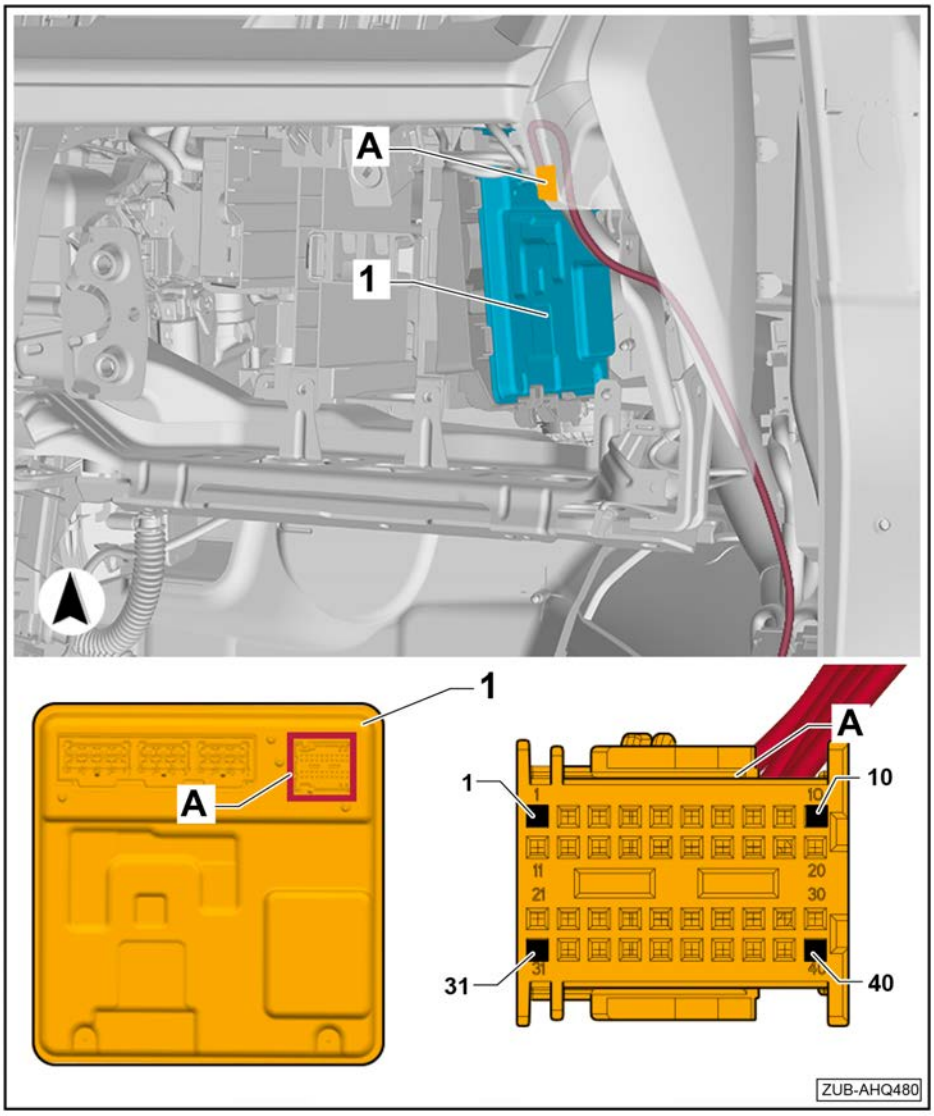


7.9 Connecting the CAN bus to the data bus diagnostic interface -J533- (left-hand-drive vehicles)

Applies to left-hand-drive vehicles without preparation (1D0) with PR no. combination: NI1/NI9.

Route the wiring harness 8Y0.055.307.A from the trailer detector control unit -J345- to the data bus diagnostic interface -J533-.

The CAN bus is connected at the data bus diagnostic interface -J533- behind the glove compartment.



– Remove connector -A- from the data bus diagnostic interface -J533-.
– Open the connector housing -A- and unpin contacts 17 and 18.
– Pin the corresponding contacts of the additional wiring harness (Y-wires) into connector -A-.

◆ Pin 17: CAN bus (CAN Low), orange/brown

◆ Pin 18: CAN bus (CAN High), green

– Pin contacts 17 and 18 from connector -A- into the first loose black 3-pin contact housing.

Pin 1 - CAN bus (CAN High), green

Pin 3 - CAN bus (CAN Low), orange/brown

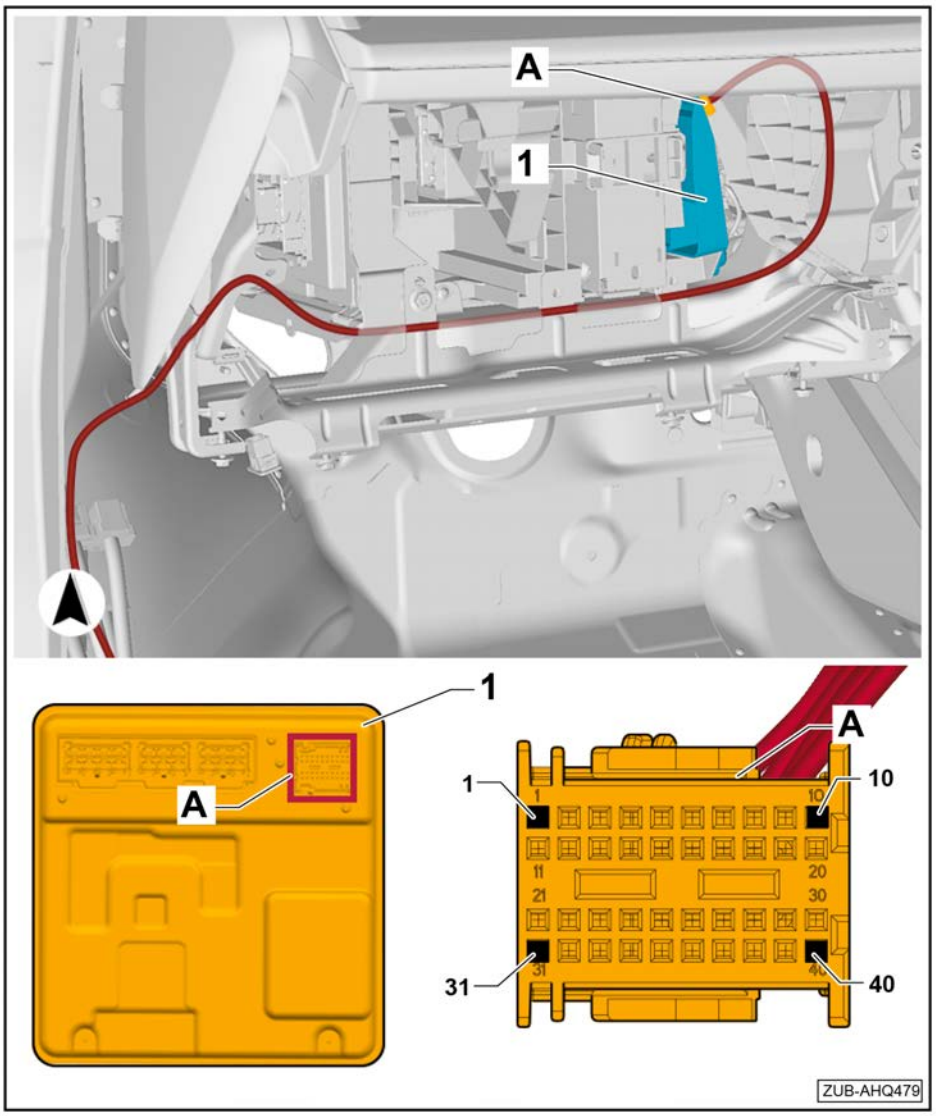
– Connect the 3-pin contact housing to the black 3-pin connector housing on the retrofit wiring harness.

– Reconnect connector -A- to the data bus diagnostic interface -J533-.

7.10 Connecting the CAN bus to the data bus diagnostic interface (right-hand-drive vehicles) -J533-

Applies to right-hand-drive vehicles without preparation (1D0) with PR no. combination: NI1/NI9.

Route the wiring harness 8Y0.055.307 from the trailer detector control unit -J345- to the data bus diagnostic interface -J533-.
The CAN bus is connected at the data bus diagnostic interface -J533- behind the glove compartment.



– Remove connector -A- from the data bus diagnostic interface -J533-.
– Open the connector housing -A- and unpin contacts 17 and 18.
– Pin the corresponding contacts of the additional wiring harness (Y-wires) into connector -A-.

- Pin 17: CAN bus (CAN Low), orange/brown
- Pin 18: CAN bus (CAN High), green

– Pin contacts 17 and 18 from connector -A- into the first loose black 3-pin contact housing.

Pin 1 - CAN bus (CAN High), green

Pin 3 - CAN bus (CAN Low), orange/brown

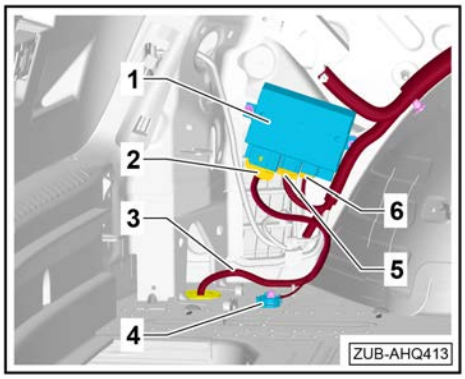
– Connect the 3-pin contact housing to the black 3-pin connector housing on the retrofit wiring harness.

– Reconnect connector -A- to the data bus diagnostic interface -J533-.

7.11 Connecting wiring harness 8Y0.055.307 or 8Y0.055.307.A to the trailer detector control unit -J345-

Applies to vehicles without preparation (1D0) with PR no. combination: NI1/NI9.

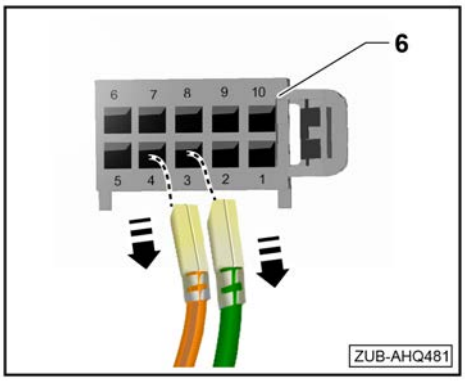
– Disconnect the supply connector -6- for the CAN bus from the trailer detector control unit -J345- -1-.



– Unpin the following wires:

NOTICE

Only required if pins 3 and 4 are occupied (applies to retrofit packages 89A.092.157.D and 89A.092.157.F).

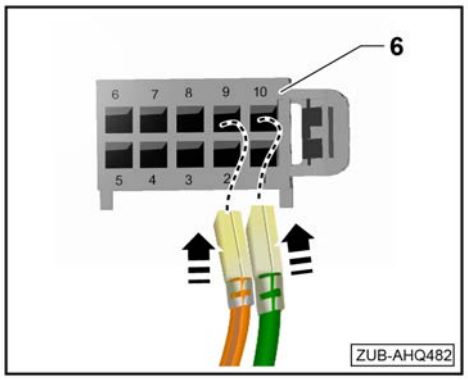


- Pin 3: CAN bus (CAN High), green
- Pin 4: CAN bus (CAN Low), orange/brown

– Re-pin pins 3 and 4 that have just been disconnected into the following slots on connector -6-.

Pin 9 - CAN bus (CAN Low), orange/brown

Pin 10 - CAN bus (CAN High), green

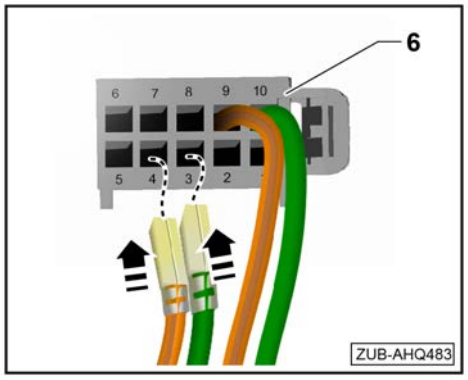


– Pin the following wires from the retrofit wiring harness 8Y0.055.307 (left-hand-drive vehicle) or 8Y0.055.307.A (right-hand-drive vehicle) into the connector -7-.

Pin 3 - CAN bus (CAN High), green

Pin 4 - CAN bus (CAN Low), orange/brown

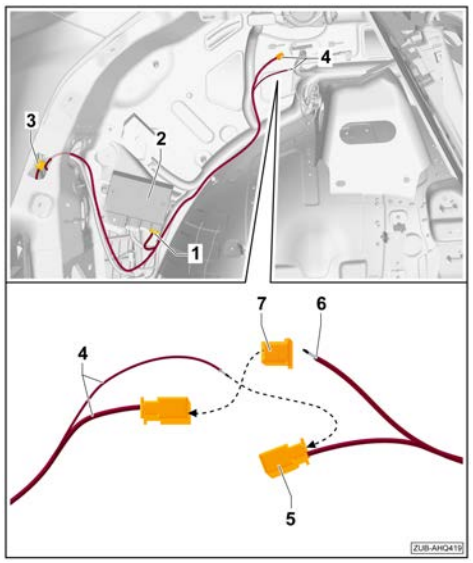
– Connect the supply connector -6- for the CAN bus to the trailer detector control unit -J345- -1- until you hear it click into place.



8 Electrical connection for towing bracket electrical release button

8.1 Installing the retrofit wiring harness for the “towing bracket electrical release button”

Applies to vehicles with storage pack QE1 (left interior light):

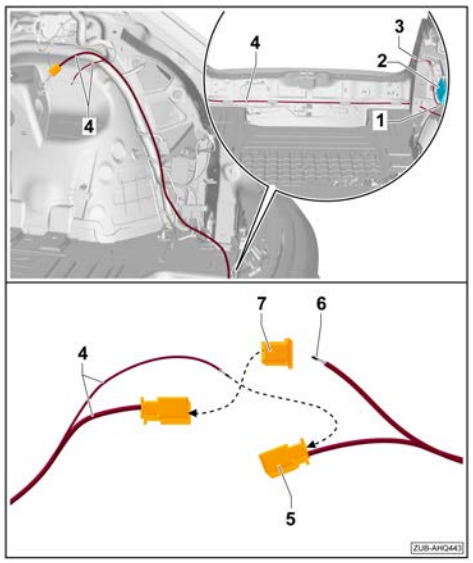


– Attach the connector -1- of the wiring harness for the towing bracket electrical release button to the trailer detector control unit -J345- -2-.
– Place and orientate the plug for the actuator switch -3- in the installation position.
– Place and orientate the loose end of the wire and the connector -4- in the installation position of the left interior light.
– Unpin the following wire from the interior light connector -5-:

Chamber 2 - brown/black wire, item 6-.

– Pin the brown/black wire -6- into chamber 2 of the supplied plug 1-1718346-1 -7-.
– Pin the loose end of the wiring harness for the towing bracket electrical release button -4- into the newly available chamber 2 of the connector for the interior light -5-.
– Connect plug 1-1718346-1 -7- with the plug housing for the towing bracket electrical release button -4-.
– Secure the wiring harness for the towing bracket electrical release button -4- to the standard wiring harness using cable ties.

Applies to vehicles without storage pack QE0 (right interior light):



– Attach the connector -1- of the wiring harness for the towing bracket electrical release button to the trailer detector control unit -J345- -2-.
– Attach the connector -1- of the wiring harness for the towing bracket electrical release button to the trailer detector control unit -J345- -2-.
– Place and orientate the plug for the actuator switch -3- in the installation position.
– Connect the wiring harness extension for the towing bracket electrical release button -4- with the wiring harness for the towing bracket electrical release button -1-.
– Tie back the loose end of the wire and insulate the contact with cable tape.
– Place and orientate the loose end of the wire and the plug of the wiring harness extension for the towing bracket electrical release button -4- in the installation position of the right-hand interior light.

– Attach the wiring harness extension for the towing bracket electrical release button -4- to the rear cross panel using the adhesive pads.
– Unpin the following wire from the right interior light connector -5-:

Chamber 2 - brown/black wire, item 6-.

– Pin the brown/black wire -6- into chamber 2 of the supplied plug 1-1718346-1 -7-.
– Pin the loose end of the wiring harness for the towing bracket electrical release button -4- into the newly available chamber 2 of the connector for the interior light -5-.
– Connect plug 1-1718346-1 -7- with the plug housing for the towing bracket electrical release button -4-.
– Secure the wiring harness for the towing bracket electrical release button -4- to the standard wiring harness using cable ties.

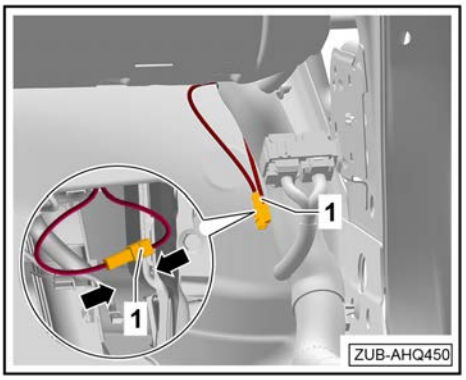
8.2 Connecting the CAN bus

Note

The CAN separation point can be present in two different installation positions.

Variant A: installation position in the footwell at the A-pillar.

Applies to vehicles with towing bracket preparation (1D7)



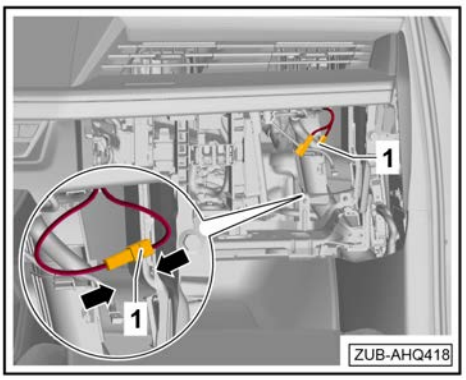
Note

The CAN bus is connected by connecting the wires in the footwell at the left-hand A-pillar. The connector is connected at the standard wiring harness and secured using foam grommets to prevent noise from developing.

– Connect the CAN bus connector -1-. Check for secure engagement.
– Secure using a foam sleeve to prevent noise.

Variant B: installation position behind the glove compartment.

Applies to vehicles with towing bracket preparation (1D7)



Note

The CAN bus is connected by connecting the wire behind the glove compartment on the left. The connector is connected at the standard wiring harness and secured using foam grommets to prevent noise from developing.

– Connect the CAN bus connector -1-. Check for secure engagement.
– Secure using a foam sleeve to prevent noise.

9 Concluding operations

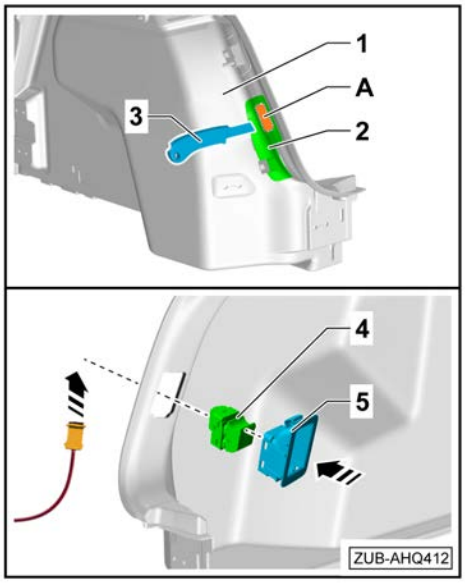
9.1 Installing the release button for the swivelling towing bracket -E474-

Assembly

– Using a cutting knife -3-, cut out the contour -A- marked in the reinforcement -2- on the luggage compartment side trim -1-.

– Carefully insert the towing bracket electrical release button -4- into the button mount -5- and clip the button into place.

– Connect the wiring harness -arrow- to the towing bracket electrical release button.



9.2 Connecting the battery

– Connect the battery ⇒Electrical system; Rep. gr. 27; Battery; Disconnecting and connecting the battery

Note

After reconnecting the power supply, the ESP warning light can only extinguish after a few metres have been driven.

9.3 Adapting the trailer detector control unit -J345- activation process

The activation process is carried out using the ⇒ vehicle diagnostic tester. This must be connected online.

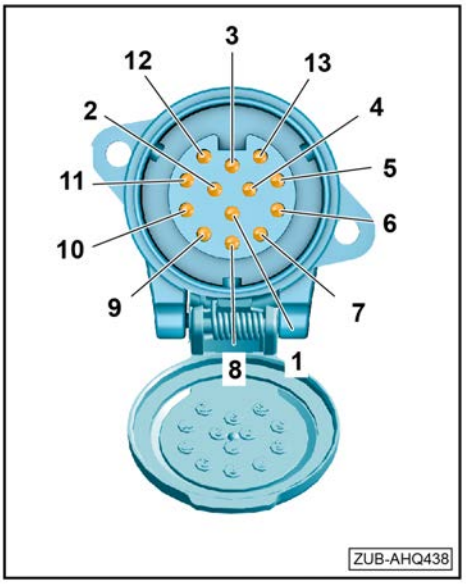
NOTICE

Before you start the activation process, go into the self-diagnosis function and check that it is possible to contact the DA69 (towing bracket control unit); this ensures that the CAN bus is connected.

9.4 Commissioning and functional check

– Check that the trailer socket -U10- functions correctly using the trailer socket tester -VAS 5800- or a trailer.

Pin assignment in the trailer socket -U10-.



1 - Terminal LTS (left turn signal)

2 - Terminal RFL (rear fog light)

3 - Terminal 31 (earth) earth for terminals 1–2, 4–8

4 - Terminal RTS (right turn signal)

5 - Terminal 58 R (right tail light)

6 - Terminal 54 (brake light)

7 - Terminal 58 L (left tail light)

8 - Terminal RVL (reversing light)

9 - Terminal 30 (battery "+ ") max. current 15 A

10 - Terminal 15 (charging cable) max. current 15 A

11 - Terminal 31 (earth) earth for terminal 10

12 - Not assigned

13 - Terminal 31 (earth) earth for terminal 9

9.5 Reassembling the vehicle

To install the components, follow the removal steps in reverse order. Observe the “Notes on installation” for the relevant components and the corresponding tightening torques.

On vehicles with lane change assist, this must be recalibrated.

WARNING

The following information must be observed when working with the lane change assist (Audi side assist):

- ***If the rear bumper cover is removed and then reinstalled, or if any modifications are made to the rear bumper cover, the lane change assist system (Audi side assist) must be recalibrated ⇒Electrical system; Rep. gr. 96; Risk of accident due to malfunction!***