

Original MINI Accessories. Installation Instructions.



Aluminium Rear-Mounted Carrier Retrofit

MINI One (R 56)

MINI Cooper (R 56)

MINI Cooper S (R 56)

Retrofit kit no.:	82 71 0 415 132	Aluminium rear-mounted carrier, ECE LHD
	82 71 0 415 133	Assembly kit
	82 71 0 415 138	Aluminium rear-mounted carrier, US
	82 71 0 418 004	Electrical kit, rear-mounted carrier
	82 71 0 415 735	Connector bracket

Installation time

The installation time is approx. 1.5 hours for the assembly kit and 2.5 hours for the electrical kit. The installation time may vary depending on the condition of the car and the equipment in it.

Before carrying out retrofitting, flash the car to the latest I level status. Depending on the production age of the car and the work already carried out on it, the programming times will vary which means that we cannot quote a specific time for this. The installation time does not include any time for programming/encoding as this depends on the age of the car and the equipment in it.

 **The electrical kit for the rear-mounted carrier must also be installed in accordance with the country-specific guidelines. ◀**

Important information

These installation instructions are primarily designed for use within the MINI dealership organisation as well as by authorised BMW service companies.

In any event, the target group for these installation instructions is specialist personnel trained on MINI cars with the appropriate specialist knowledge.

All work must be completed using the latest MINI repair manuals, circuit diagrams, servicing manuals and work instructions, in a rational order, using the prescribed tools (special tools) and observing current health and safety regulations.


To avoid unnecessary extra work and/or costs, if any installation or function problem occurs, after a brief troubleshooting session (approx. 0.5 hours), please contact the following:

- 1. Either your national subsidiary or your regional office, or**
- 2. The support team via the Aftersales Assistance Portal (ASAP), using the optional technical parts support application.**

Specify the chassis number and the part number of the installed retrofit kit and give a precise description of the problem.

Do not archive the hard copy of these installation instructions since daily updates are made by ASAP!

Pictograms:

 Denotes instructions that draw your attention to special features.

◀ Denotes the end of the instruction or caution text.

Notes on assembly


All pictures show LHD cars; proceed accordingly on RHD cars.

The installation is shown for the left side of the car only in some places, proceed in the same way for the right side of the car.

Ensure that cables/lines are not kinked or damaged as you install them in the car. Costs incurred as a result of this will not be reimbursed by BMW AG.

Additional cables/lines that you install must be secured with cable ties.

If the specified PIN chambers are occupied, bridges, double crimps or twin-lead terminals must be used.

 The customer must be shown how to fit and remove the rear-mounted carrier in accordance with the installation instructions. ◀

Notes on ordering

The following parts are not components of the retrofit kit and must be ordered separately (for part number and designation, see Electronic Parts Catalogue):

– Betalink 1K gluing kit, part no. 82 699 408 866

If the SPEG low is fitted in the car, this must be replaced by the SPEG high (see on page 24 picture 056 0105 V):

– SPEG high if required (for part number, see Electronic Parts Catalogue)

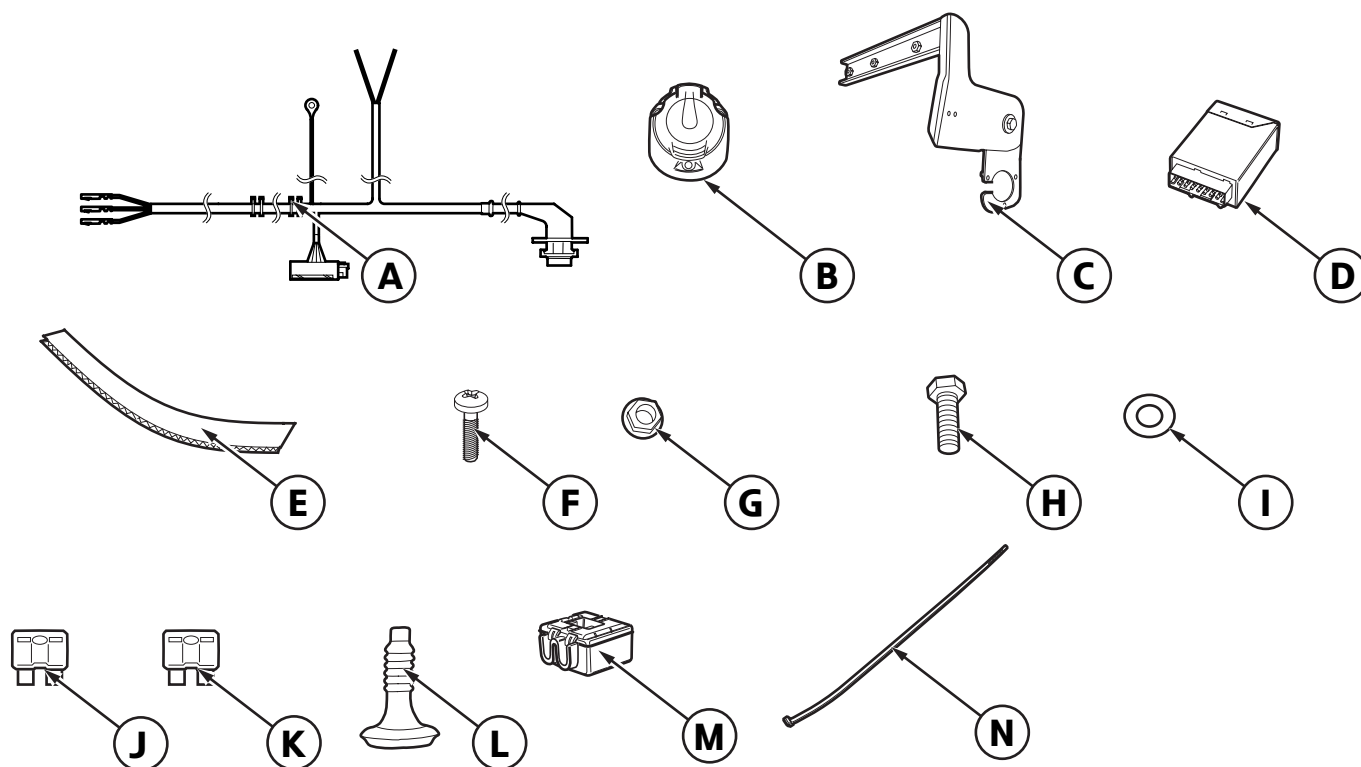
Special tools required

None

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1. Parts overview - electrical kit (optional - only for extending the installation of electrical components)

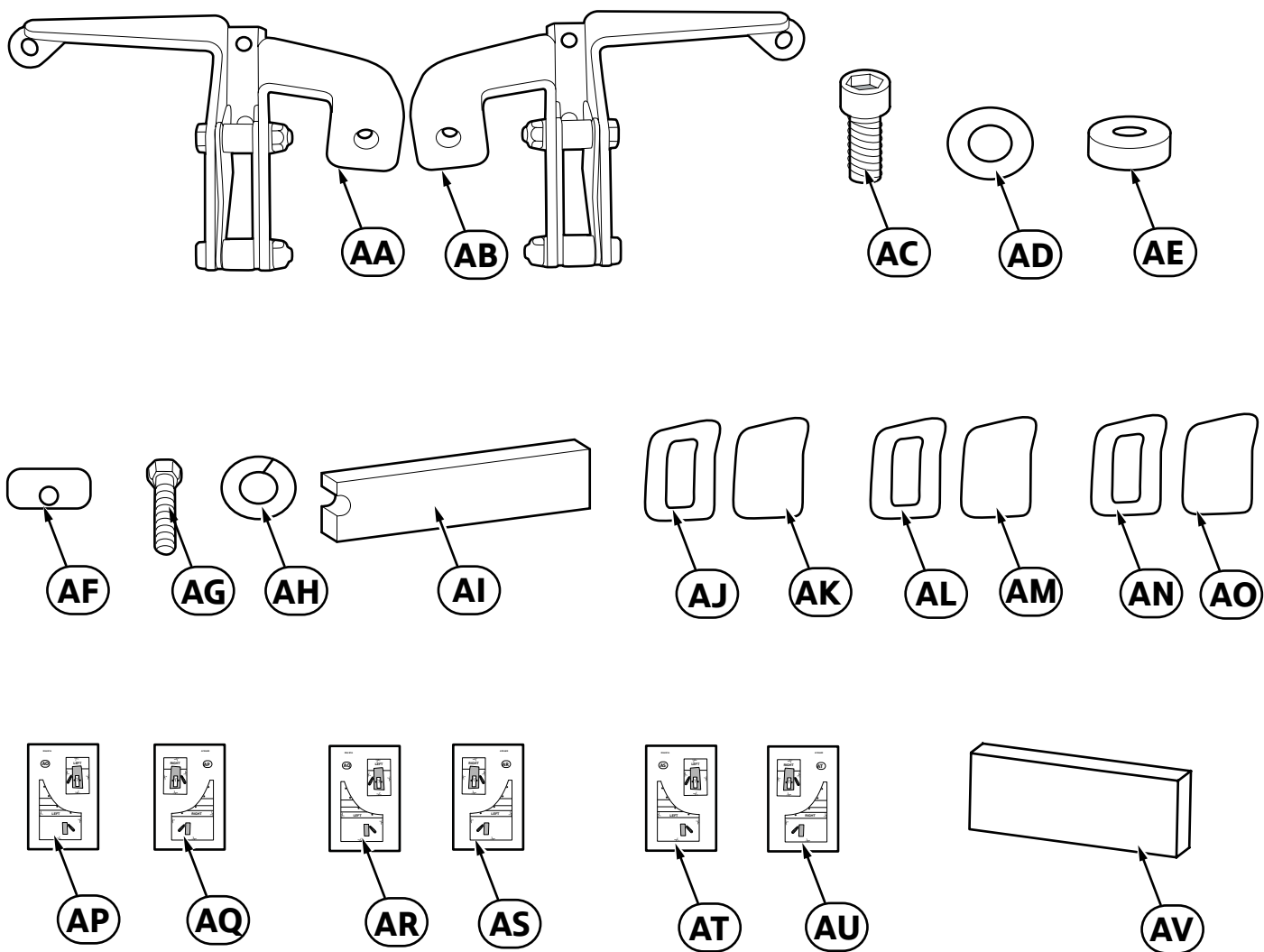


056 0001 V

Legend

- | | |
|---|---|
| A Wiring kit | I Shim, Ø 8.2 mm (3x) |
| B Socket outlet | J Fuse, 30 A (2x) |
| C Socket outlet bracket | K Fuse, 20 A |
| D Electronic control unit | L Grommet |
| E Two-part Velcro strip (300 mm) | M Insulation displacement connector (4x) |
| F Bolt, M5 x 35 (3x) | N Cable tie (20x) |
| G Nut, self-locking, M5 (3x) | |
| H Bolt, M8x20 (3x) | |

2. Parts overview - installation kit



056 0002 V

Legend

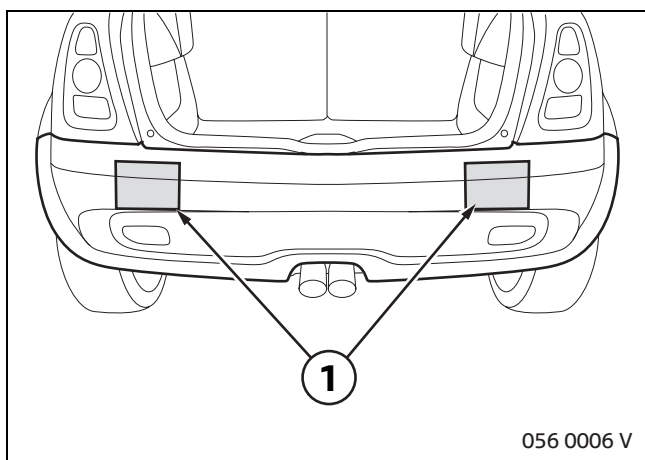
- AA** Left bracket
- AB** Right bracket
- AC** Hexagon-socket-head bolt, bracket, M8x30 (4x)
- AD** Shim, Ø 8.2 mm (6x)
- AE** Space bushing (2x, for ECE vehicles only)
- AF** Shim (2x)
- AG** Bolt, M8x40 (2x)
- AH** Circlip, Ø 8.2 (4x)
- AI** Fitting aid
- AJ** Frame, rear apron, MINI One/ MINI Cooper, L/R (2x)
- AK** Panel, rear apron, MINI One/ MINI Cooper, L/R (2x)
- AL** Frame, rear apron, MINI Cooper S, L/R (2 x)
- AM** Panel, rear apron, MINI Cooper S, L/R (2 x)
- AN** Frame, rear apron, MINI Aero, L/R (2 x)
- AO** Panel, rear apron, MINI Aero, L/R (2 x)
- AP** Template, rear apron, MINI One/MINI Cooper, left
- AQ** Template, rear apron, MINI One/MINI Cooper, right
- AR** Template, rear apron, MINI Cooper S, left
- AS** Template, rear apron, MINI Cooper S, right
- AT** Template, rear apron, Aeropackage, left
- AU** Template, rear apron, Aeropackage, right
- AV** Gauge block

3. Preliminary work for installation of electrical kit (optional - only for extending the installation of electrical components)

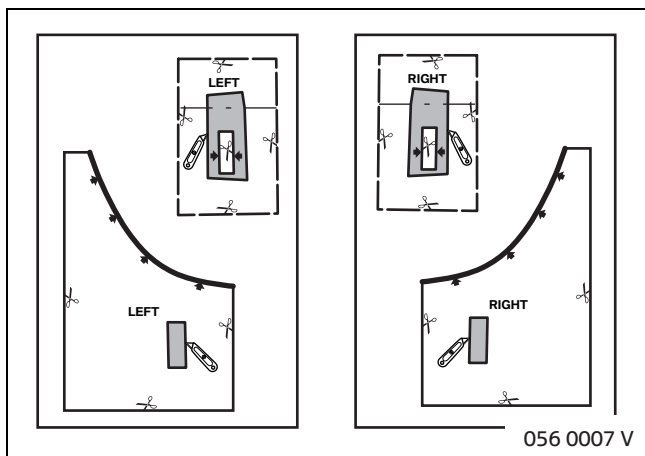
	TIS No.
Conduct a brief test	—
Disconnect the negative terminal from the battery	12 00 ...
Dismantle the following components in advance	
Storage shelf trim	51 46 003
Luggage compartment floor trim panel	51 47 101
Luggage compartment light	63 31 080
CD changer, if applicable	—
Trim on rear apron	51 46 050
Rear headrests	52 26 390
Backrest for right rear seat	52 26 012
Rear seat	52 26 005
Right rear side panel	51 43 002
Entrance cover strip	51 47 000
Right rear light	63 21 180

4. Installation of assembly kit

Type	MINI One/MINI Cooper	MINI Cooper S	Aeropackage
L/R template	AP/AQ	AR/AS	AT/AU
Centring template	916 mm		
Frame	AJ (MINI One, L/R)	AL (MINI Cooper S, L/R)	AN (Aero, L/R)
Trim	AK (MINI One, L/R)	AM (MINI Cooper S, L/R)	AO (Aero, L/R)

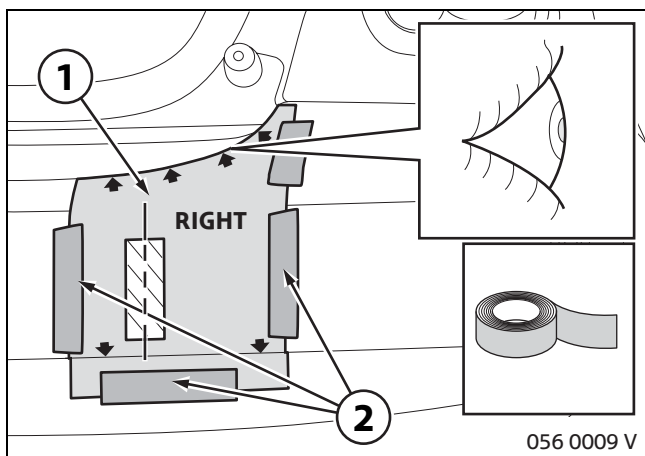


Thoroughly clean rear bumper trim in the areas shown (1).



▶ Make sure that you use the correct template (see table above). ◀

Cut out the left and right template along the cutting edge.



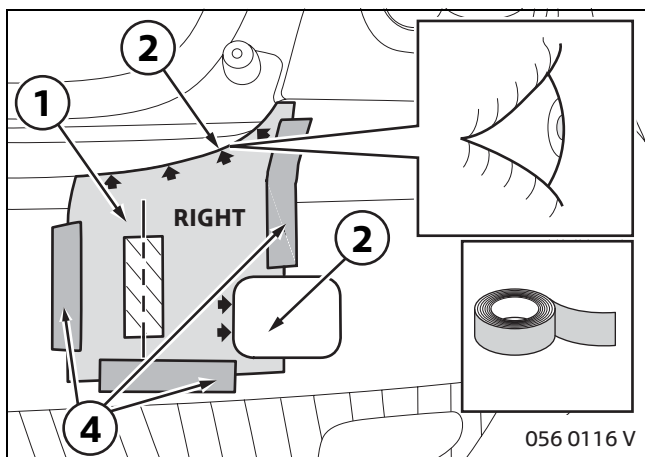
For MINI One / MINI Cooper only:

Place the pre-cut section of the right template (1) with the marked edge along the radius and the edge of the bumper trim.

From the side view, the template must be positioned at the start of the radius.

Affix template with adhesive tape (2).

4. Installation of assembly kit

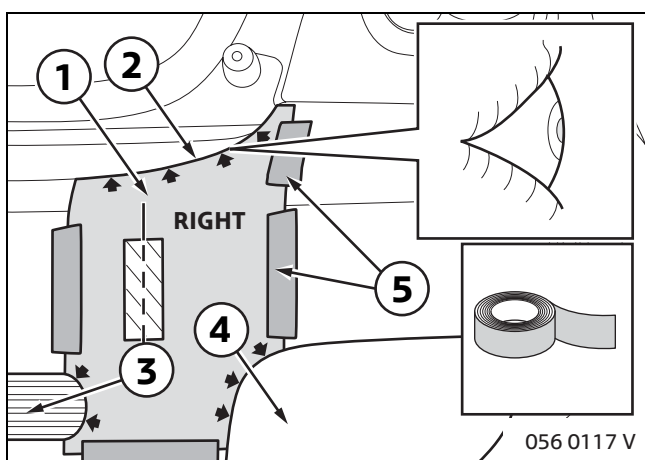


For MINI Cooper S only:

Place the pre-cut section of the right template (1) with the marked edge along the radius of the bumper trim (2) and on the cover of the towing eye (3).

In the side view, the template must always be placed at the start of the radii.

Affix aligned template with adhesive tape (4).



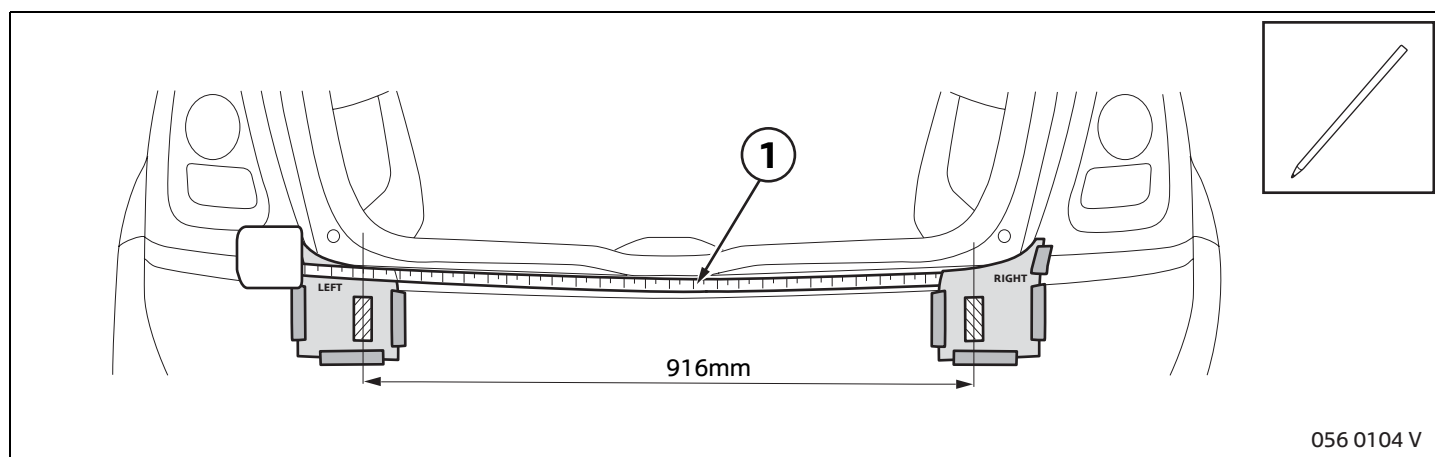
For Aeropackage only:

Place the pre-cut section of the right template (1) with the marked edge along the radius of the bumper trim (2), the rear grille (3) and around the recess of the rear fog light (4).

From the side view, the template must be positioned at the start of the radii.

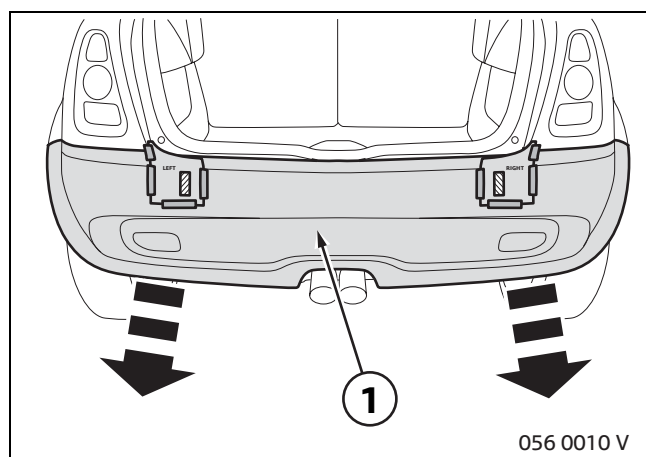
Affix template with adhesive tape (5).

4. Installation of assembly kit

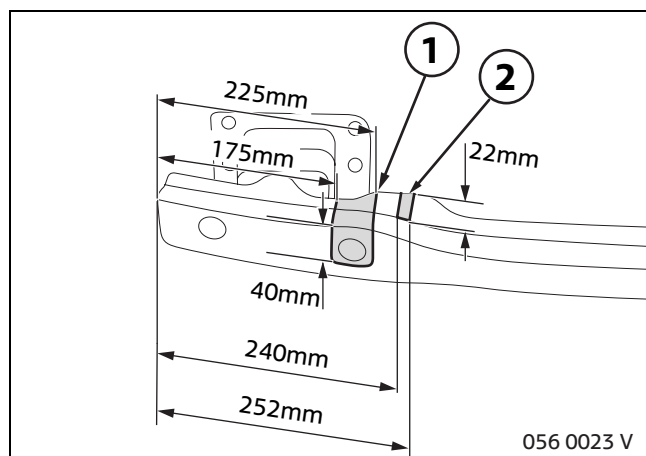


Position the centring template (= 916 mm, see table on page 7) at the left side using a tape measure (1). The centring measurement must be measured along the outer contour of the rear bumper trim for this.

Place the left template along the marked edge or edges of the bumper trim and at a distance of 916 mm to the right template. Affix with adhesive tape.



Remove the rear bumper trim (1) including the templates according to TIS No. 51 12 156.



For ECE vehicles only

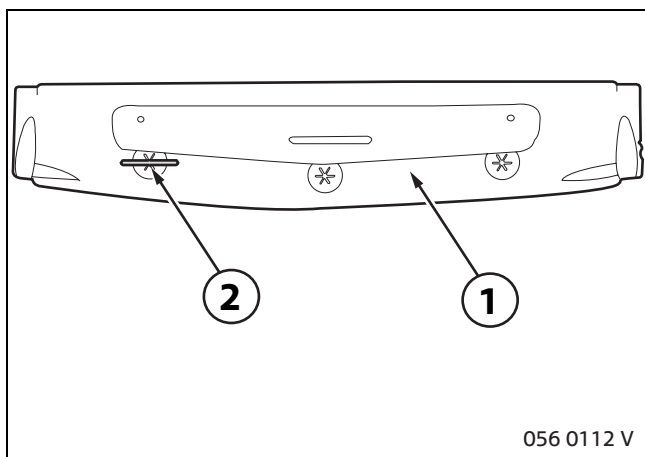
Remove crash support according to TIS No. 51 12 050.

Mark the openings (1) and (2) on both sides of the crash support according to the specified dimensions.

Carefully make the openings (1) and (2) with a cut grinder.

Then deburr and treat with the usual MINI corrosion protection measures.

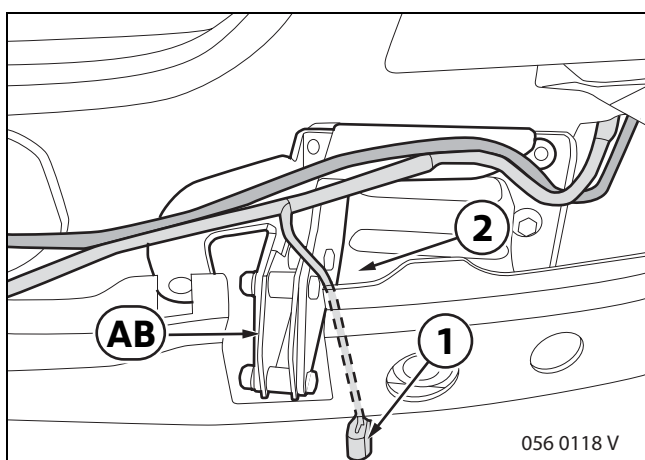
4. Installation of assembly kit



Cut a notch (2) in the shaped foam part (1).

Hand tighten the crash support again with the foam shaped part (1) using only the two outer bottom bolts to do this.

▶ At this point continue with Chapter 7, Installing and Connecting Electrical Kit. ◀

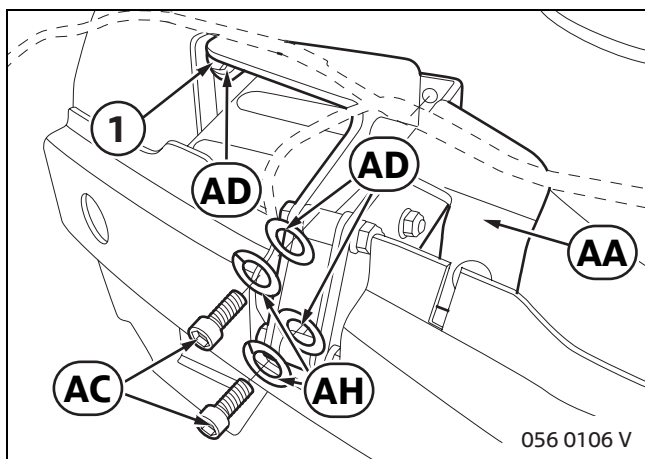


For MINI Cooper S and vehicles with aerodynamic package only:

Insert shaped foam part and rear-mounted carrier bracket **AB**.

Before attaching rear-mounted carrier bracket **AB**, feed the plug of the rear fog lights (1) between rear-mounted carrier bracket **AB** and the bumper connection (2).

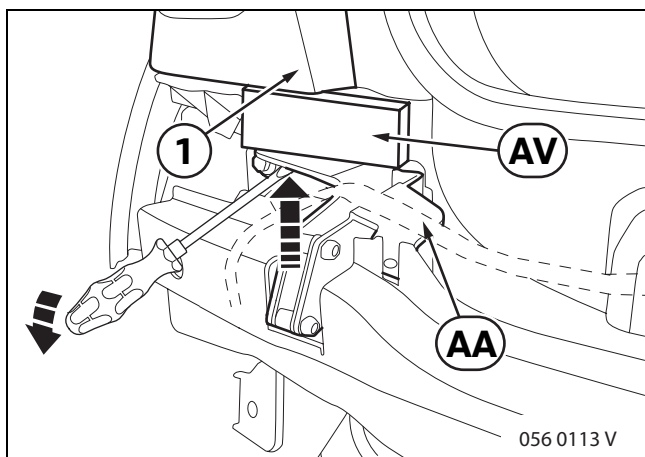
▶ Do not lay any cables between the shaped foam part and the brackets. ◀



For all ECE vehicles:

Insert shaped foam part and left bracket **AA**.

Hand tighten rear-mounted carrier bracket **AA** at top left with the original bolt (1) as well as with bolts **AC**, shims **AD** and circlips **AH**.



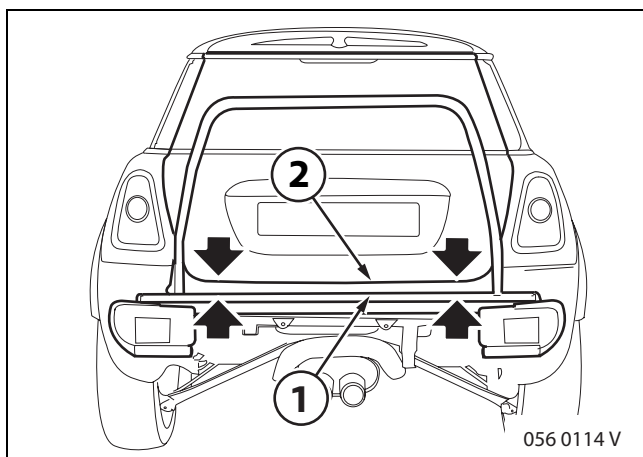
Install gauge block **AV** between the lower edge of the rear light pot (1) and left bracket **AA**.

Raise left bracket **AA** with a screwdriver when screwing until gauge block **AV** is firmly clamped between bracket **AA** and the rear light pot (1).

All bolts of bracket **AA** and the bumper must be tightened to 21 Nm.

Remove gauge block **AV** again.

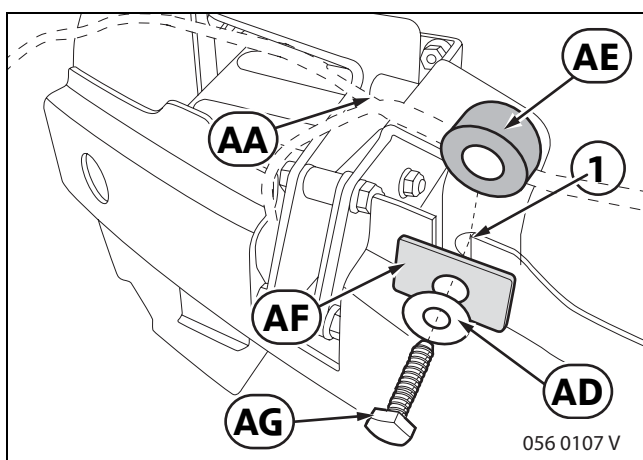
4. Installation of assembly kit



▶ At this point continue with Chapter 10, Checking aluminium rear-mounted carrier adjustment, if necessary. ◀

After attaching the bracket for the rear-mounted carrier, mount the aluminium rear-mounted carrier (1). Visually check that the aluminium rear-mounted carrier (1) is parallel to the tailgate (2).

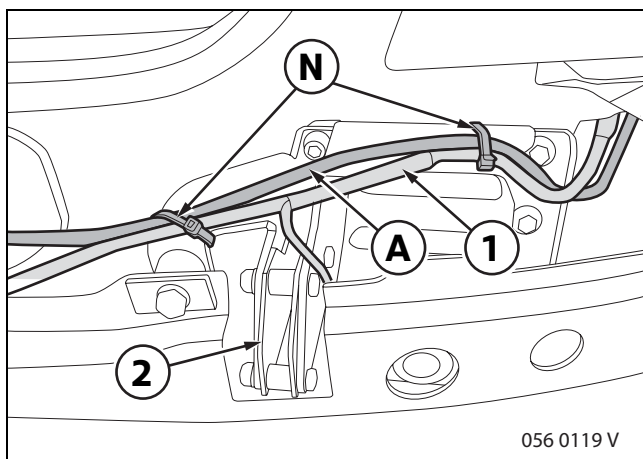
If necessary, remove the aluminium rear-mounted carrier (1) and correct the vertical position of a bracket. Then reassemble the aluminium rear-mounted carrier (1).



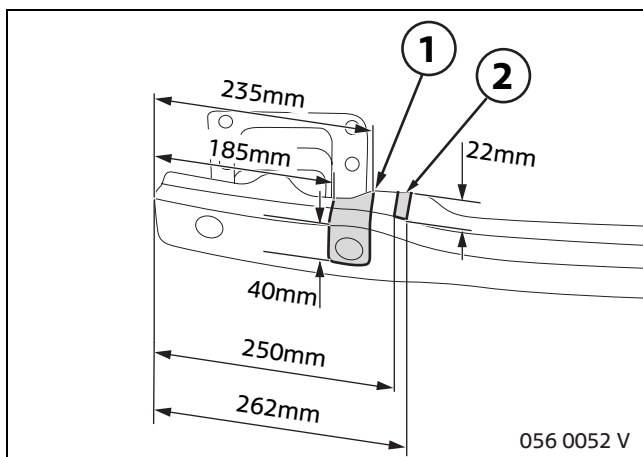
Install space bushing **AE** between bracket **AA** and crash support.

Attach bracket **AA** to the crash support with shim **AF**, shim **AD** and bolt **AG** through the opening (1).

Tighten bolt **AG** to 15 Nm. Use locking bolts for this.



If necessary, attach cable kit **A** together with the cable of the rear fog lights (1) to the rear-mounted carrier bracket (2) using cable strap **N**.



For SAE vehicles only:

Remove bumper according to TIS No.: 51 12 050.

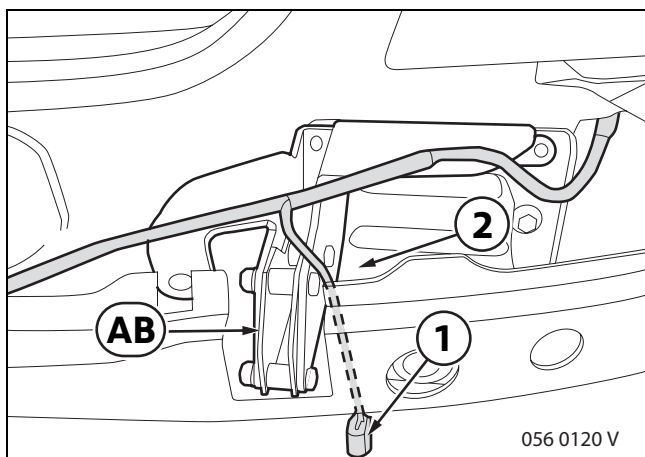
Mark the openings (1) and (2) on both sides of the bumper according to the specified dimensions.

Make the openings (1) and (2) with a cut grinder.

Then deburr and treat with the usual MINI corrosion protection measures.

Assemble and hand tighten the bumper using the two bottom outermost bolts only. Use screw locking varnish on the bolts.

4. Installation of assembly kit

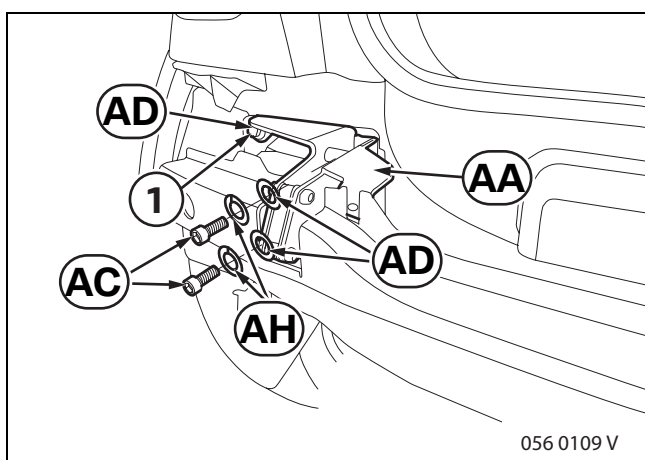


For MINI Cooper S and vehicles with aerodynamic package only:

Insert rear-mounted carrier bracket **AB**.

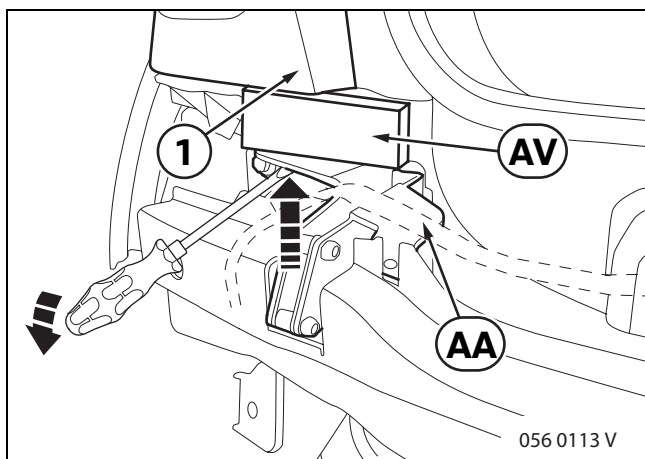
Before attaching rear-mounted carrier bracket **AB**, feed the plug of the rear fog lights (1) between rear-mounted carrier bracket **AB** and the bumper connection (2).

⏏ Do not lay any cables between the shaped foam part and the bracket. ◀



For all SAE vehicles:

Hand tighten rear-mounted carrier bracket **AA** at top left with the original bolt (1) as well as with bolts **AC**, shims **AD** and circlips **AH**.

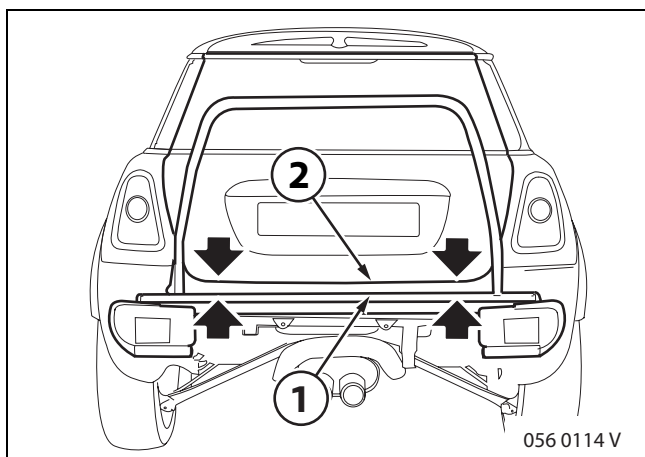


Insert gauge block **AV** between the lower edge of the rear light pot (1) and left bracket **AA**.

Push left bracket **AA** upwards until gauge block **AV** is firmly clamped between bracket **AA** and rear light pot (1).

All bolts of bracket **AA** and the bumper must be tightened to 21 Nm.

Remove gauge block **AV** again.



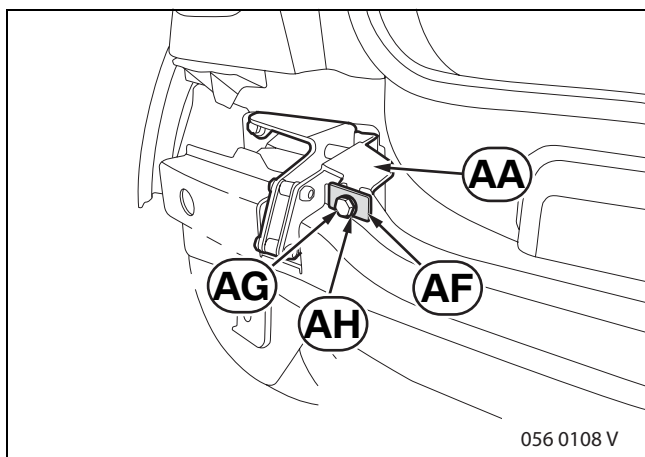
⏏ At this point continue with Chapter 10, Checking adjustment of aluminium rear-mounted carrier, if necessary. ◀

After attaching the bracket for the rear-mounted carrier, mount the aluminium rear-mounted carrier (1). Visually check that the aluminium rear-mounted carrier (1) is parallel to the tailgate (2).

If necessary, remove the aluminium rear-mounted carrier (1) and correct the vertical position of a bracket.

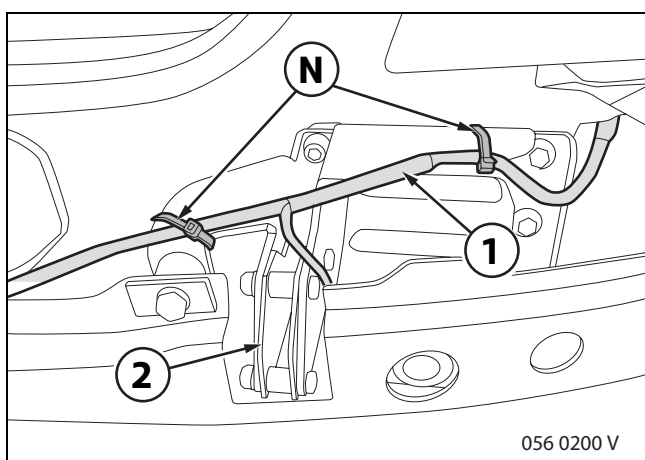
Then reassemble the aluminium rear-mounted carrier (1).

4. Installation of assembly kit

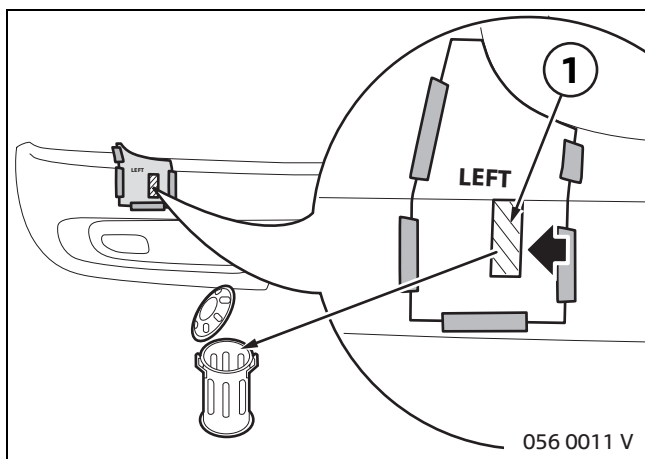


Attach shim **AF** and shim **AD** to bracket **AA** through the opening (1) with bolt **AG**.

Tighten bolt **AG** to 15 Nm.



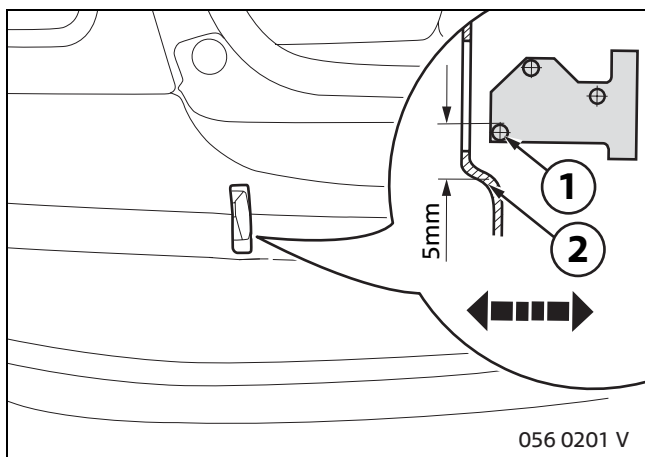
Attach the cable of the rear fog lights (1) to the rear-mounted carrier bracket (2) using cable strap **N**.



For all vehicles:

Cut out the marked area (1) with a suitable tool (fret saw).

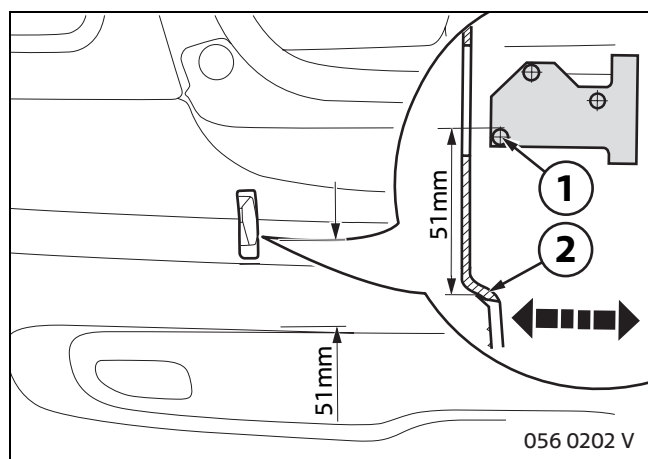
Then reattach the bumper trim according to TIS No. 51 12 156.



For MINI One / MINI Cooper only:

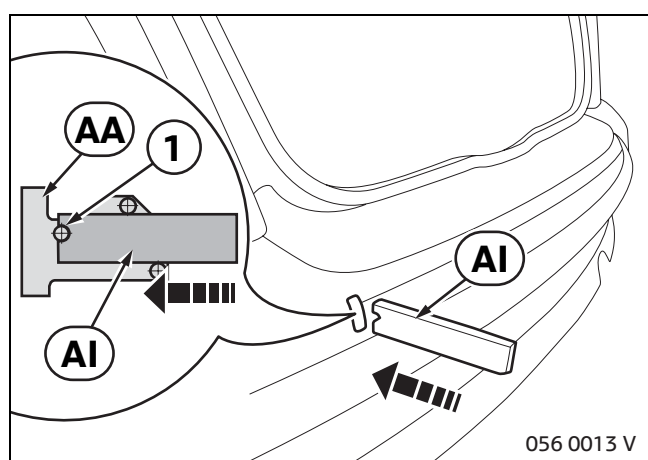
Check that the dimension from the top edge of the lower roller (1) of the rear-mounted carrier bracket to the edge of the rear apron (2) is 5 mm and adjust if necessary by bending the lower rear apron bracket.

4. Installation of assembly kit




For MINI Cooper S only:

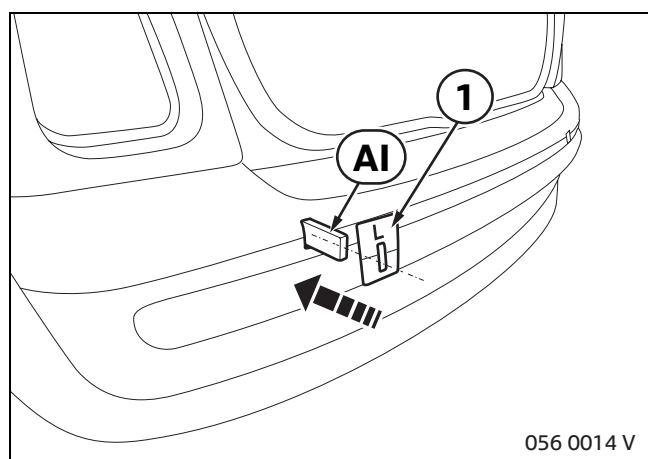
Check that the dimension from the top edge of the lower roller (1) of the rear-mounted carrier bracket to the edge of the rear apron (2) is 51 mm and adjust if necessary by bending the lower rear apron bracket.



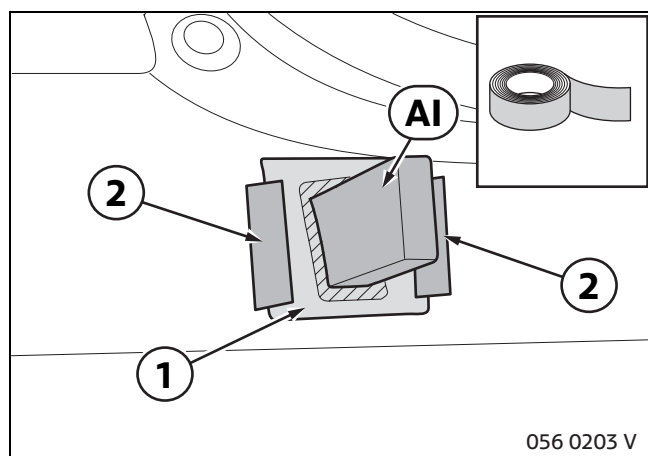
Insert fitting aid **AI** so that the recess (1) of the fitting aid is at the top.

The recess (1) must be guided onto the bracket bushing.

 If necessary, carefully trim the cutout in the rear apron with a knife to provide clearance so that fitting aid **AI** can be inserted. ◀



Cut out the main section (1) of the matching template (see table on page 7) and push over fitting aid **AI**.

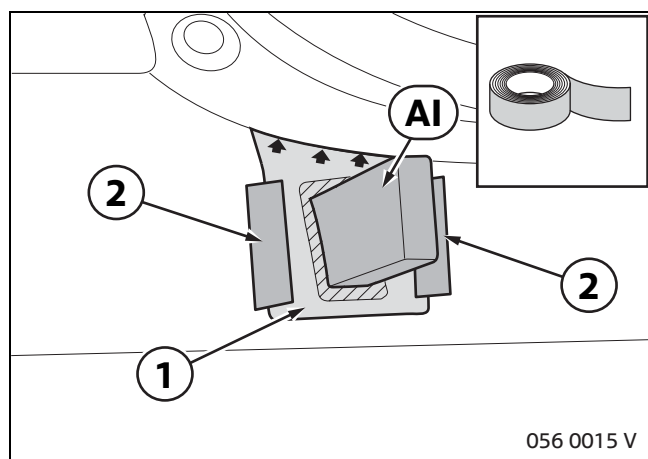


For all vehicles without aerodynamic package:

Attach template (1) to the rear bumper trim with adhesive tape (2).

Then remove fitting aid **AI** and remove rear bumper trim according to TIS No. 51 12 156.

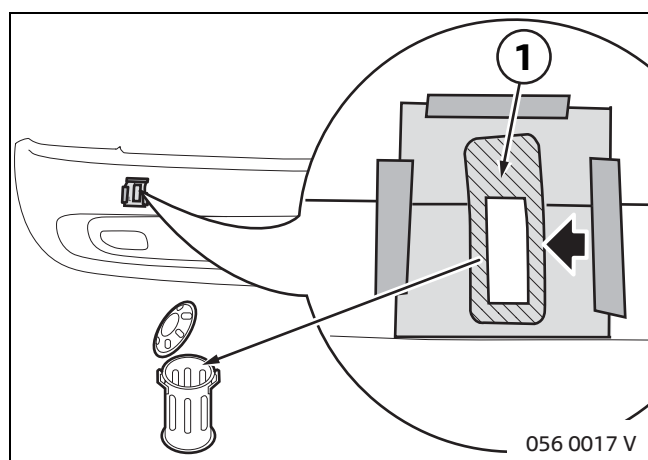
4. Installation of assembly kit



For vehicles with aerodynamic package only:

Place the template (1) with the marked edge along the radius of the bumper trim and affix with adhesive tape. From the side view, the template must be placed at the start of the radius.

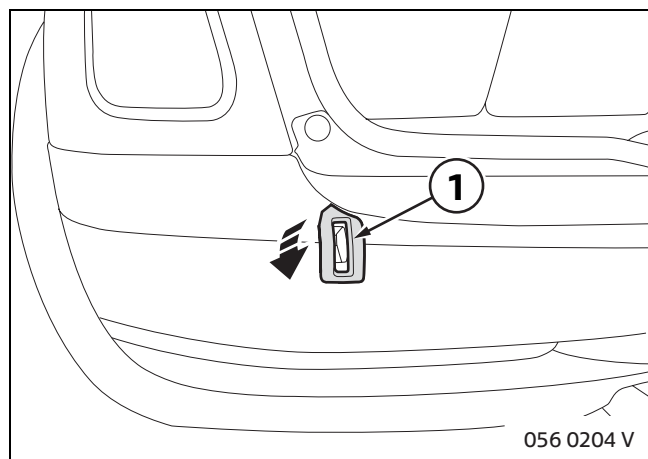
Then remove fitting aid AI and remove rear bumper trim according to TIS No. 51 12 156.



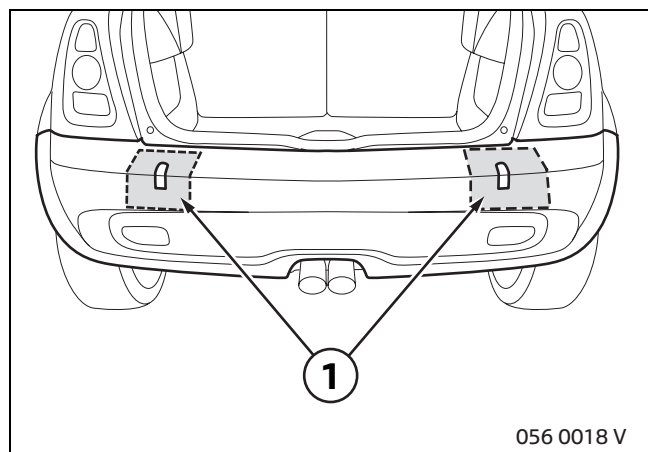
For all vehicles:

Cut out the marked area with a suitable tool (fret saw). Carefully deburr the cutout with a file.

Reattach the rear bumper trim.



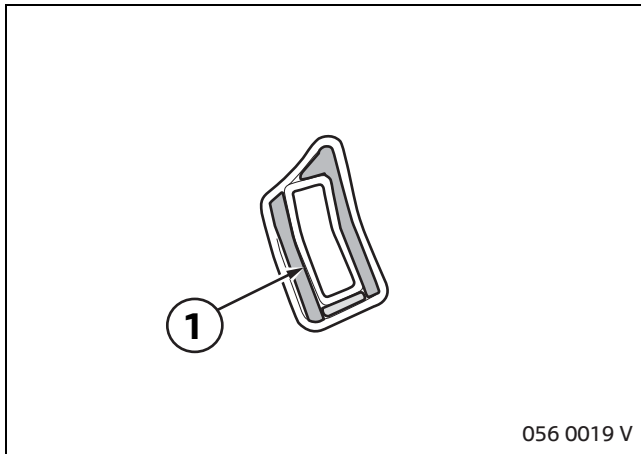
Insert trim (1) - if necessary, trim the cutouts in the rear bumper trim so that the trim is aligned to the bracket.



▶ Follow the gluing instructions in the installation instructions of the Betalink gluing kit. ◀

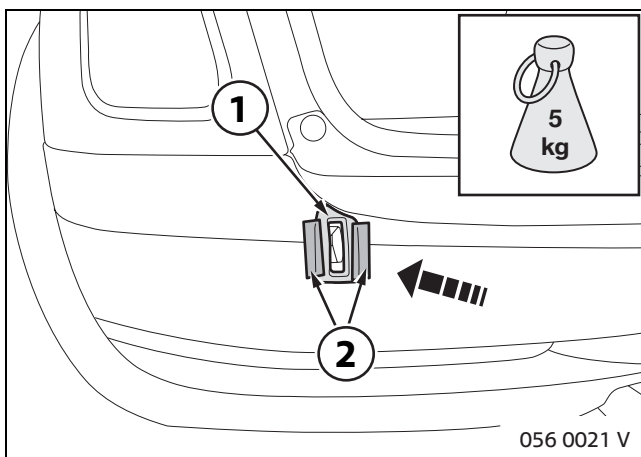
Thoroughly clean the rear bumper trim in the areas of the cutouts (1) with Beta Clean.

4. Installation of assembly kit



▶ Make sure that only the matching frame is used for the bumper trim (see table on page 7). ◀

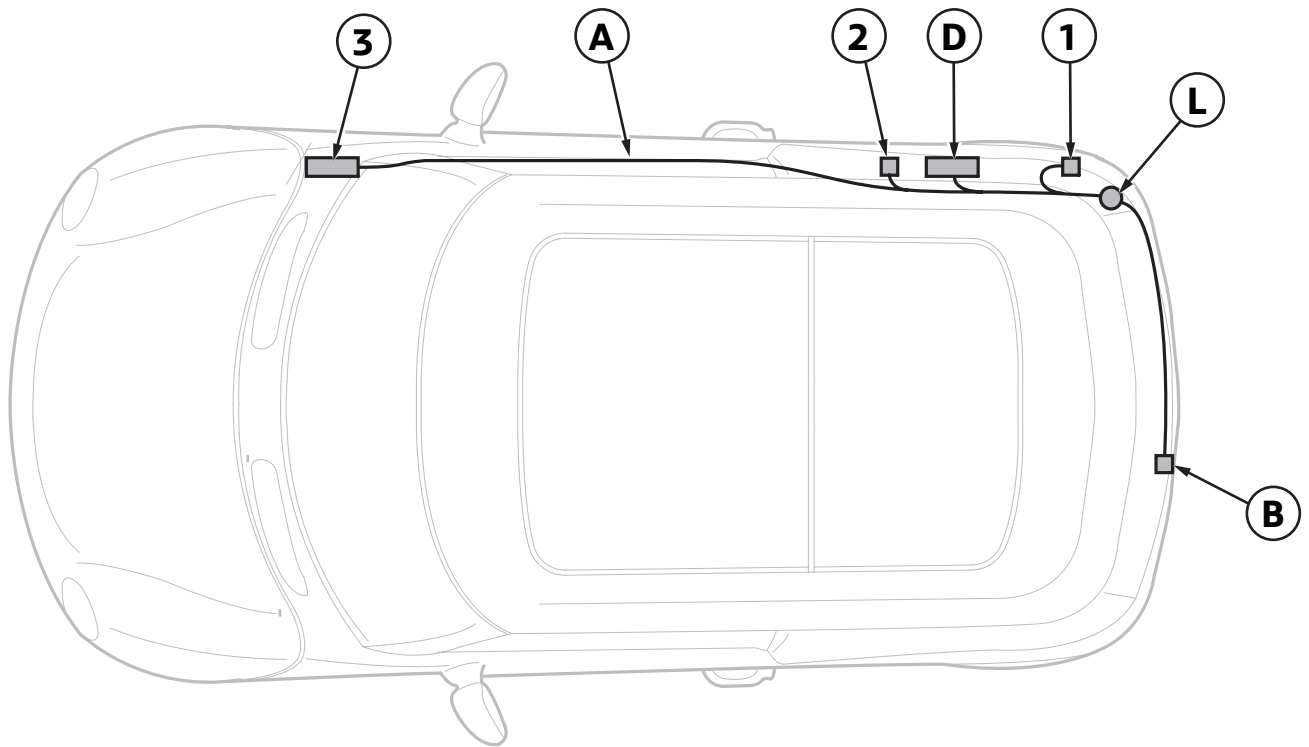
Clean the area (1) on the back of the frame with Beta Clean and apply Betalink glue.



Press the frame (1) onto the bumper trim and affix with adhesive tape (2).

Immediately remove any excess Betalink glue if necessary and clean the surfaces with Beta Clean.

5. Installation and layout diagram of electrical kit (optional - only for extending the installation of electrical components)

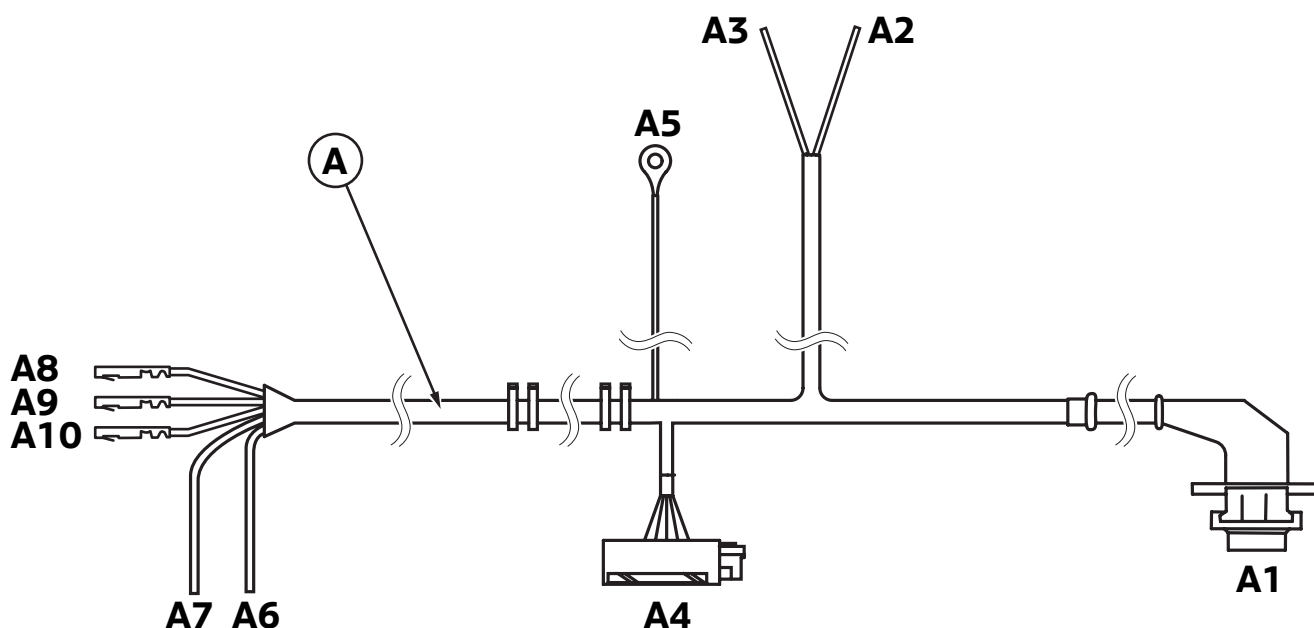


056 0004 V

Legend

- A** Wiring kit
- B** Socket outlet
- D** Electronic control unit
- L** Grommet
- 1** Rear light
- 2** Ground support point, wheel arch
- 3** SPEG

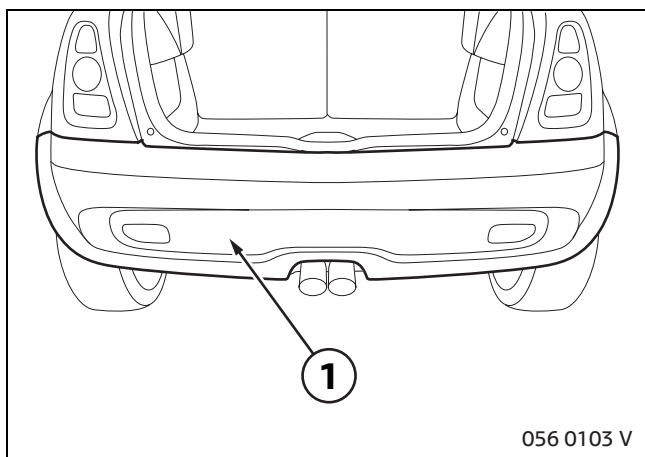
6. Connection overview of electrical kit (optional - only for extending the installation of electrical components)



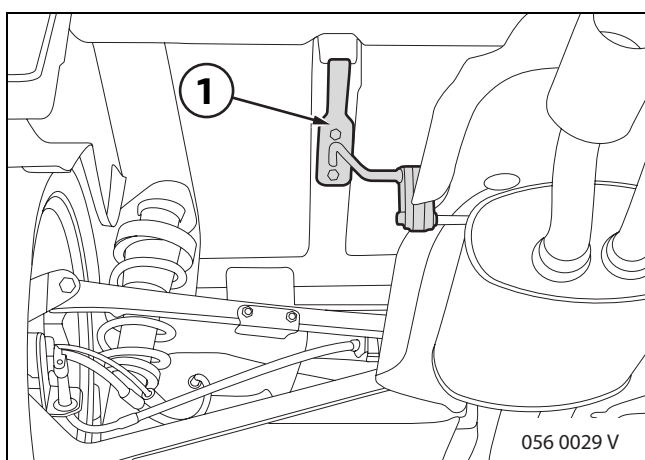
056 0003 V

Item	Description	Signal	Wire colour / cross section	Connection location in vehicle	Designation/ plug-in location
A	Wiring kit	—	—	—	—
A1	Socket housing	—	—	To electrical connector of trailer	X630B
A2	Open wire	FRAHL	BLRT 0.75 mm ²	With insulation displacement connector to right rear light E47	X318 PIN 6
A3	Open wire	54 R	GE 0.75 mm ²	With insulation displacement connector to right rear light E47	X318 PIN 3
A4	Socket housing			x-pin connector on trailer module	X609
A5	Cable shoe	TL 31	BR 2.5 mm ² 2.5 mm ² 0.75 mm ²	To ground support point of wheel arch	X490
A6	Open wire	K-CAN High	ORGN 0.35 mm ²	With insulation displacement connector to same coloured cable on SPEG	X11002 PIN 13
A7	Open wire	K-CAN Low	GN 0.35 mm ²	With insulation displacement connector to same coloured cable on SPEG	X11002 PIN 26
A8	Socket contact	TL 30	RTVI 1.5 mm ²	To SPEG	X11001 PIN 9
A9	Socket contact	TL 30	RTWS 2.5 mm ²	To SPEG	X11003 PIN 10
A10	Socket contact	TL 30	RTBL 2.5 mm ²	To SPEG	X11003 PIN 5

7. Installation of electrical kit (optional - only for extending the installation of electrical components)

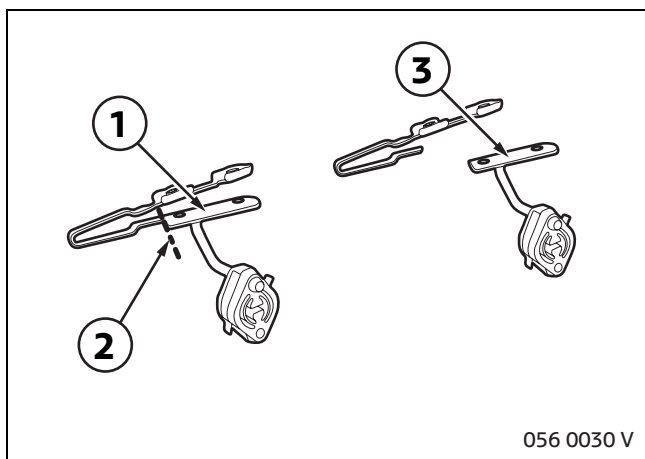


If necessary, remove the bumper trim according to TIS No. 51 12 156.

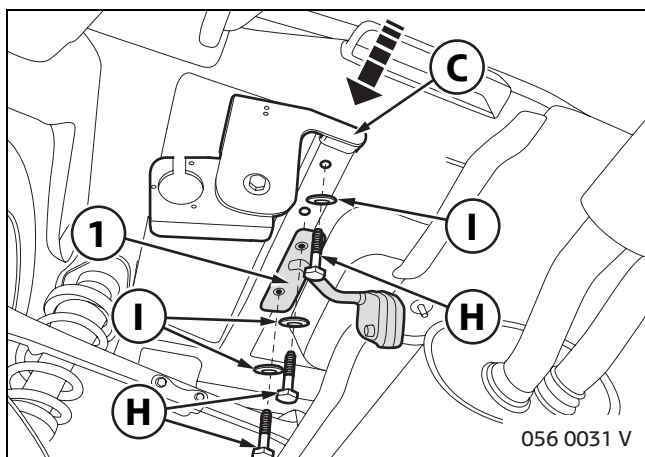


For MINI Cooper S only:

Unscrew the exhaust system bracket (1).



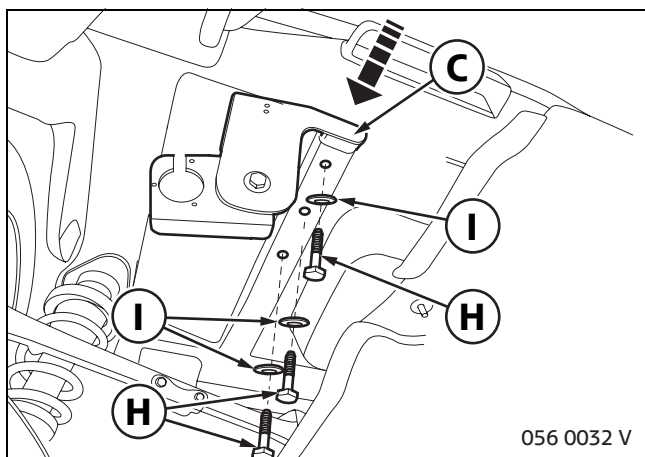
Detach the exhaust system bracket (1) at the edge indicated (2). Only the detached piece (3) is used for connecting socket holder C.



▶ Remove the sealing compound from the support member if necessary and treat support member with the usual MINI corrosion protection measures. ◀

Insert connector bracket C into the support member. Tighten bracket of exhaust system (1) with bolts H and shims I.

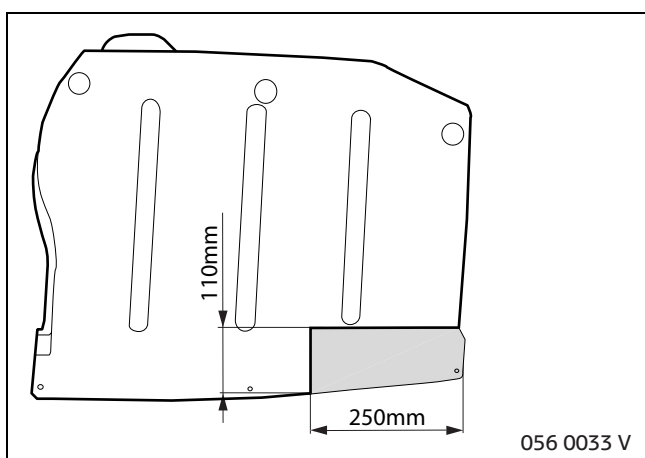
7. Installation of electrical kit (optional - only for extending the installation of electrical components)



For MINI One and MINI Cooper only:

Remove the body sealing compound from the support member if necessary and treat support member with the usual MINI corrosion protection measures. ◀

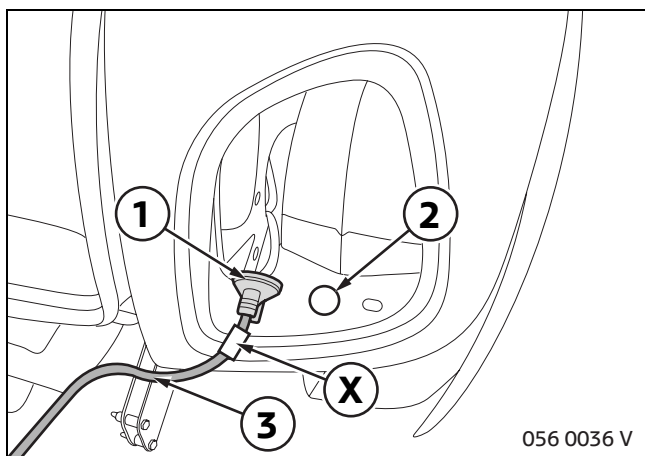
Insert connector bracket C into the support member and tighten with bolts H and washers I.



For MINI One and MINI Cooper without inflatable spare tyre only:

Cut opening in the underfloor cover with a suitable tool (fret saw).

Check clearance of the socket holder and, if necessary, trim opening in the underfloor cover.



For all vehicles:

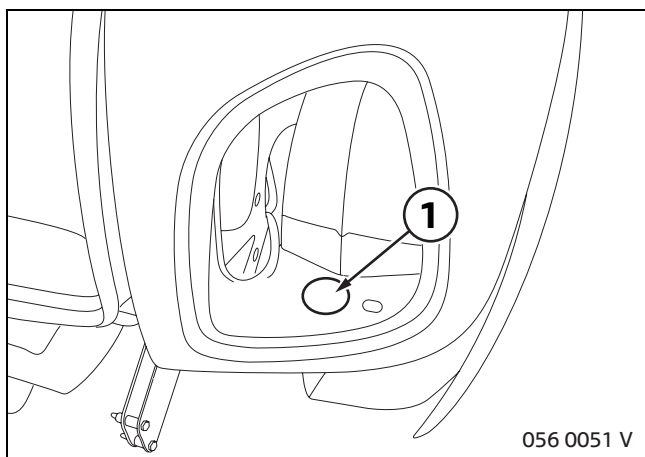
Pull the grommet (1) out of the bore hole (2) behind the right rear light.

Unthread the bumper wiring harness (3).

Mark the position (X) of the grommet (1) on the wiring harness with adhesive tape.

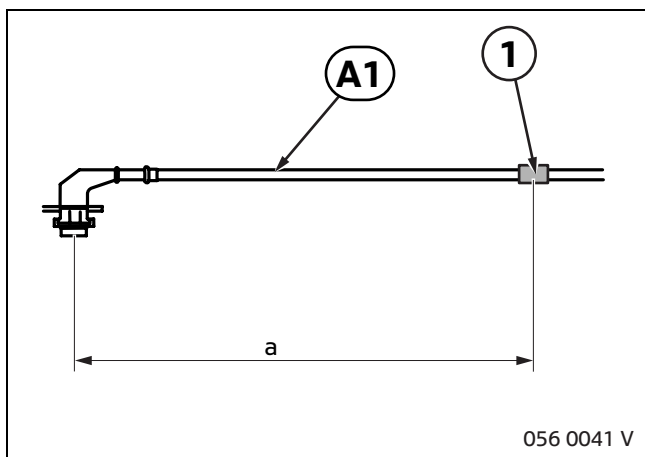
Then cut through and remove the grommet (1).

Make sure you do not damage the cables. ◀



Drill out bore hole (1) to Ø 40 mm, deburr and treat with the usual MINI corrosion protection measures.

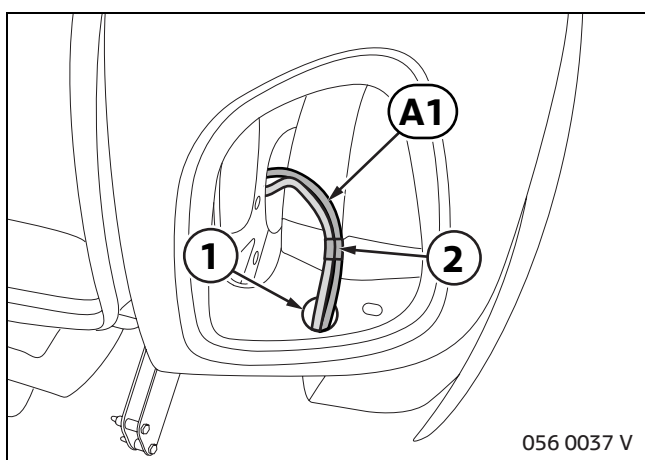
7. Installation of electrical kit (optional - only for extending the installation of electrical components)



Mark the position of the grommet on branch **A1** with adhesive tape (1):

- a = 1800 mm

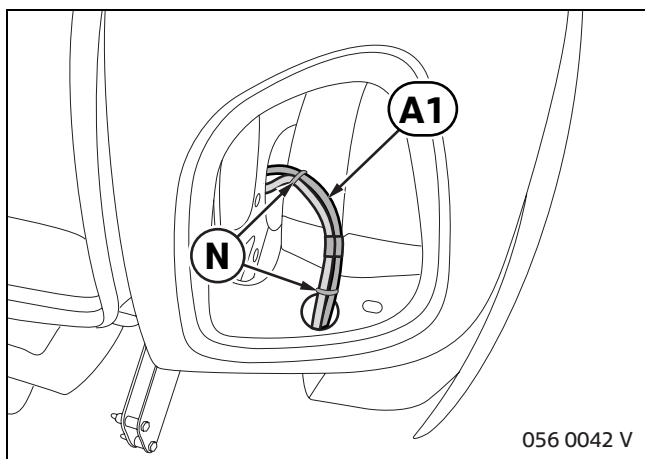
056 0041 V



Route branch **A1** from the inside to the outside through the bore hole (1).

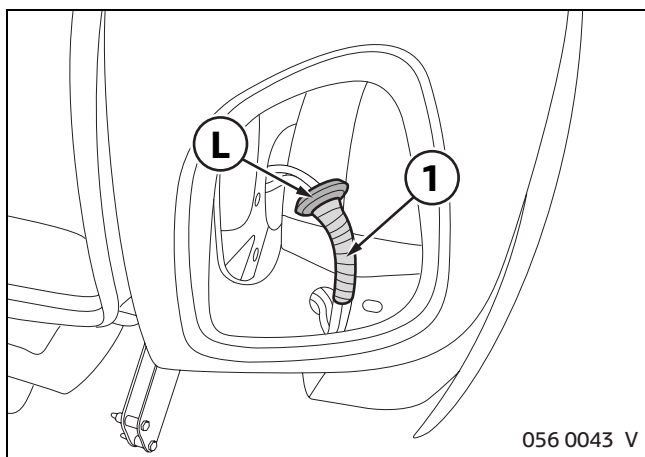
Lay the marks (2) of the bumper wiring harness and branch **A1** on top of one another.

056 0037 V



Attach branch **A1** to existing wiring harness with cable strap **N**.

056 0042 V

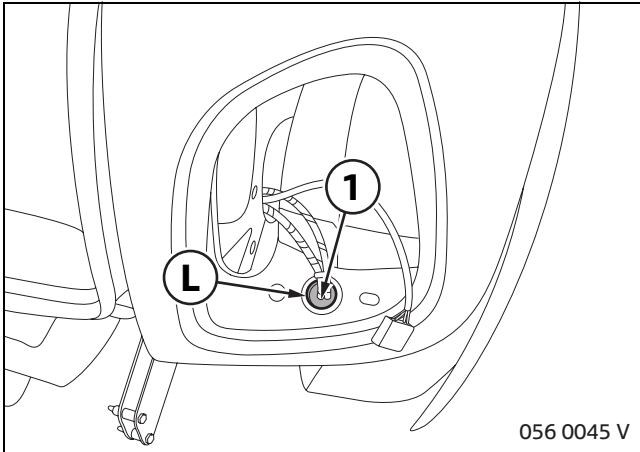


Cut grommet **L** lengthways and place around both wiring harnesses at the marks.

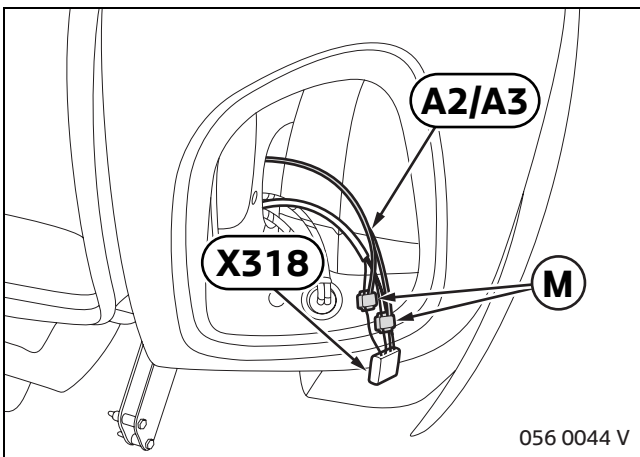
Wrap adhesive tape (1) around grommet **L**.

056 0043 V

7. Installation of electrical kit (optional - only for extending the installation of electrical components)

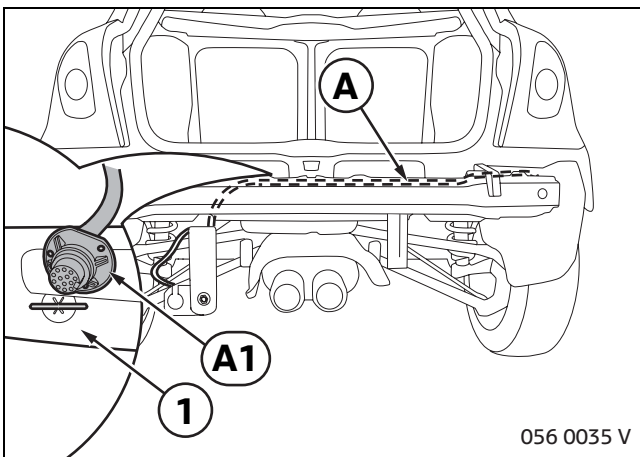


Insert grommet **L** into the bore hole.
Then fill the grommet with Betalink glue (1).



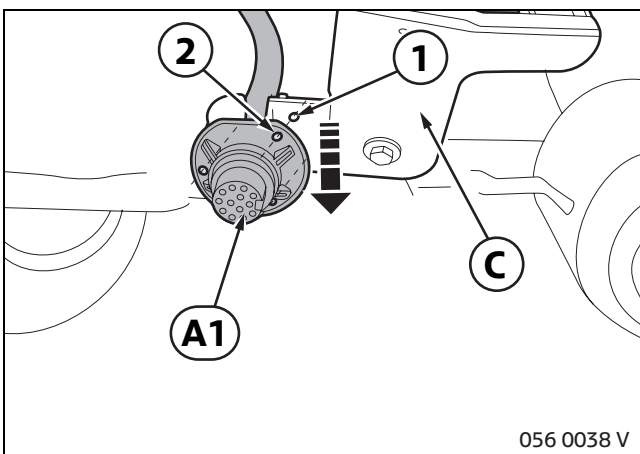
Connect branches **A2** and **A3** with insulation displacement connectors **M** to plug **X318** on right rear light as follows:

- **A2**/cable BLRT to PIN 6
- **A3**/cable GE to PIN 3



Connect cable kit **A** with PDC/NSW wiring harness and lay to top left of the bumper.

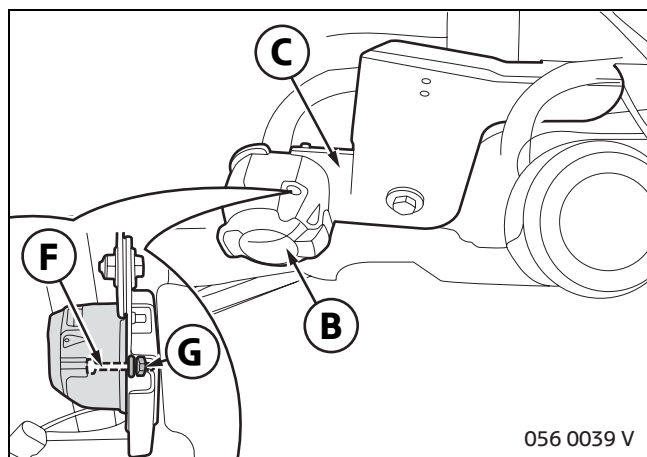
Guide branch **A1** through the shaped foam part (1).



Insert branch **A1** in connector bracket **C**.

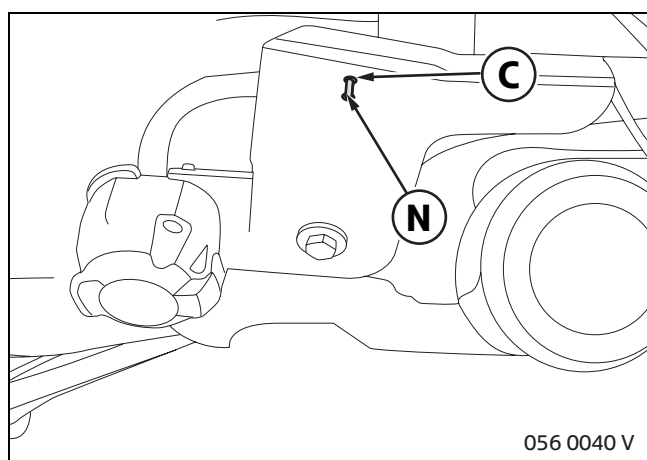
Make sure that the bore holes (1) and (2) are aligned with one another. ◀

7. Installation of electrical kit (optional - only for extending the installation of electrical components)



▶ It must be possible to open connector **B** when it is swivelled upwards to the right side. ◀

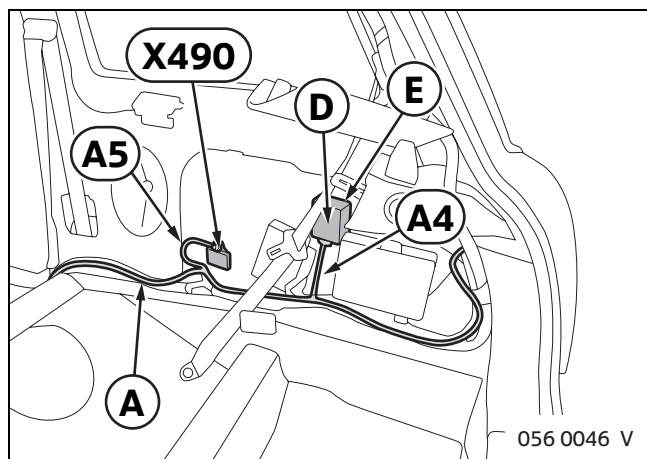
Screw connector **B** onto socket holder **C** with bolts **F** and nuts **G**.



Attach cable to socket holder **C** through existing bore holes with cable strap **N**.

▶ Check that it can be swivelled in and out. The cable must be able to move without any pulling tension. It must not chafe on the edges or come into contact with hot parts.

Tie back long cables if necessary. ◀



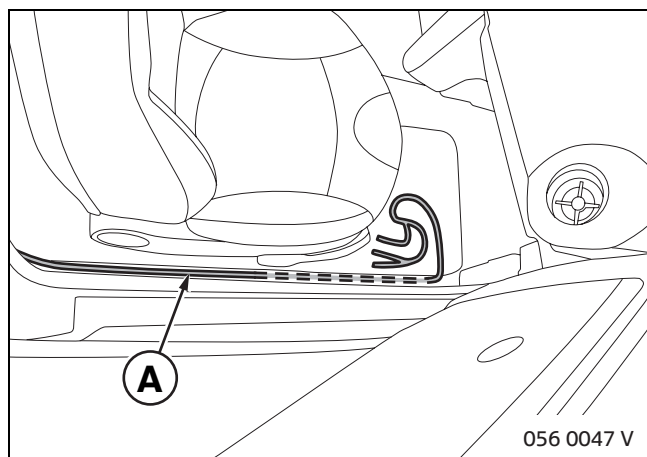
Cut Velcro tape **E** into strips of equal length. Remove protective strips from the gluing surfaces of the Velcro tapes and stick them next to each other on the underside of electronic control unit **D**.

Connect branch **A4** to the electronic control unit.

Pull protective strips off the second gluing surface of Velcro tapes **E** and attach electronic control unit **D** to the side wall.

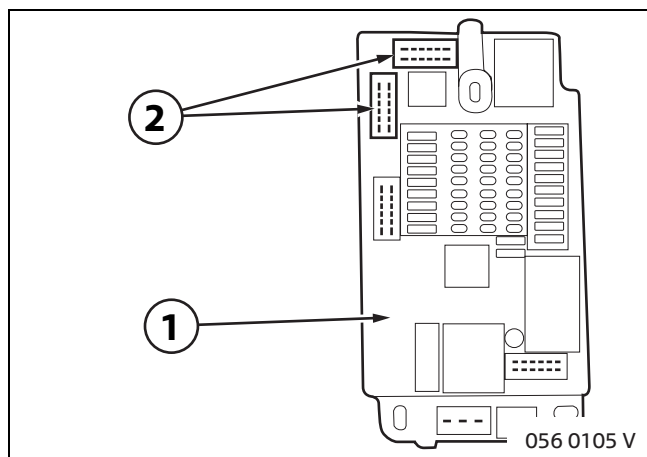
Connect branch **A5** with cable shoe to ground support point **X490**.

Route cable kit **A** along the existing wiring harness to the front passenger footwell.



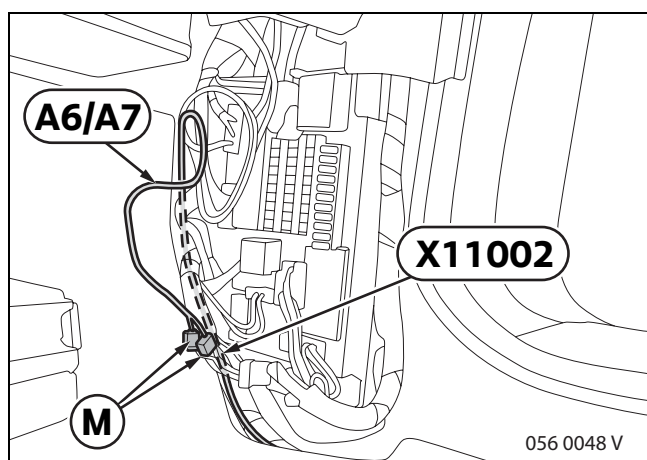
Route cable kit **A** along the door sill to the SPEG in the front passenger footwell.

7. Installation of electrical kit (optional - only for extending the installation of electrical components)



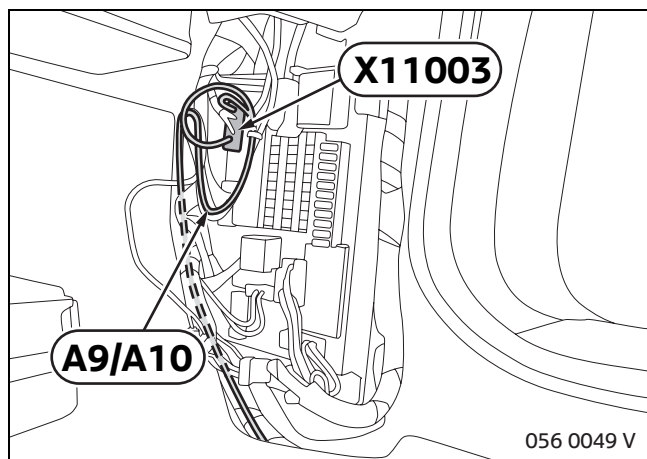
▶ If the SPEG high (1) is connected in the vehicle, both pin housings (2) are fitted with pin contacts. These are not present in the SPEG low. In this case, the SPEG low must be replaced by an SPEG high (see also Information on ordering parts on page 2). ◀

Replace the SPEG low by the SPEG high (1) if necessary (for part number, see Electronic Parts Catalogue).



Connect branches **A6** and **A7** with insulation displacement connector **M** to plug **X11002** as follows:

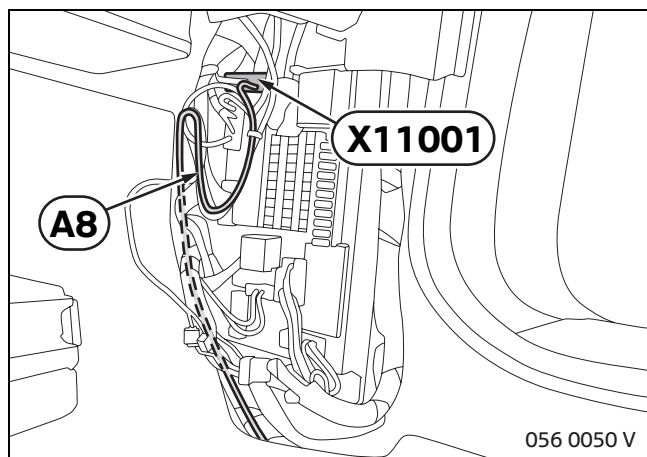
- **A6**/cable ORGN to PIN 13
- **A7**/cable GN to PIN 26



Connect branches to plug **X11003** as follows:

- branch **A9**, RTWS in PIN 10
- branch **A10**, RTBL in PIN 5

Install both fuses **J** in fuse holders 2 and 4.



Connect branch **A8**, RTVI in PIN 9 of plug **X11001**.

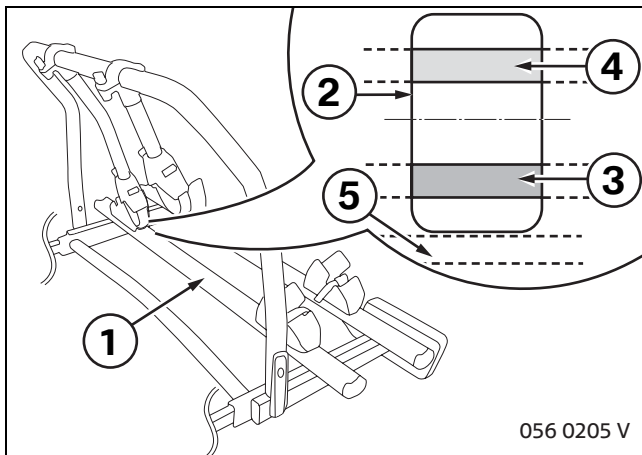
Insert fuse **K** in fuse holder 41.

▶ Then continue with the installation of the assembly kit (picture 056 011 V on page 11). ◀

8. Concluding work and coding

The retrofit system is relevant for coding.

- Connect the vehicle battery
- Code retrofit with Software Service Station (SSS) using the **Retrofit** path
- Conduct a brief test
- Conduct a function test
- Reassemble the vehicle
- Connect lighting kit cable to the connector and check lighting
- Check basic setting of the aluminium rear-mounted carrier in the brackets and adjust if necessary (see Chapter 10)




There is an inspection glass (2) on both sides below the rear wheel rail (1)

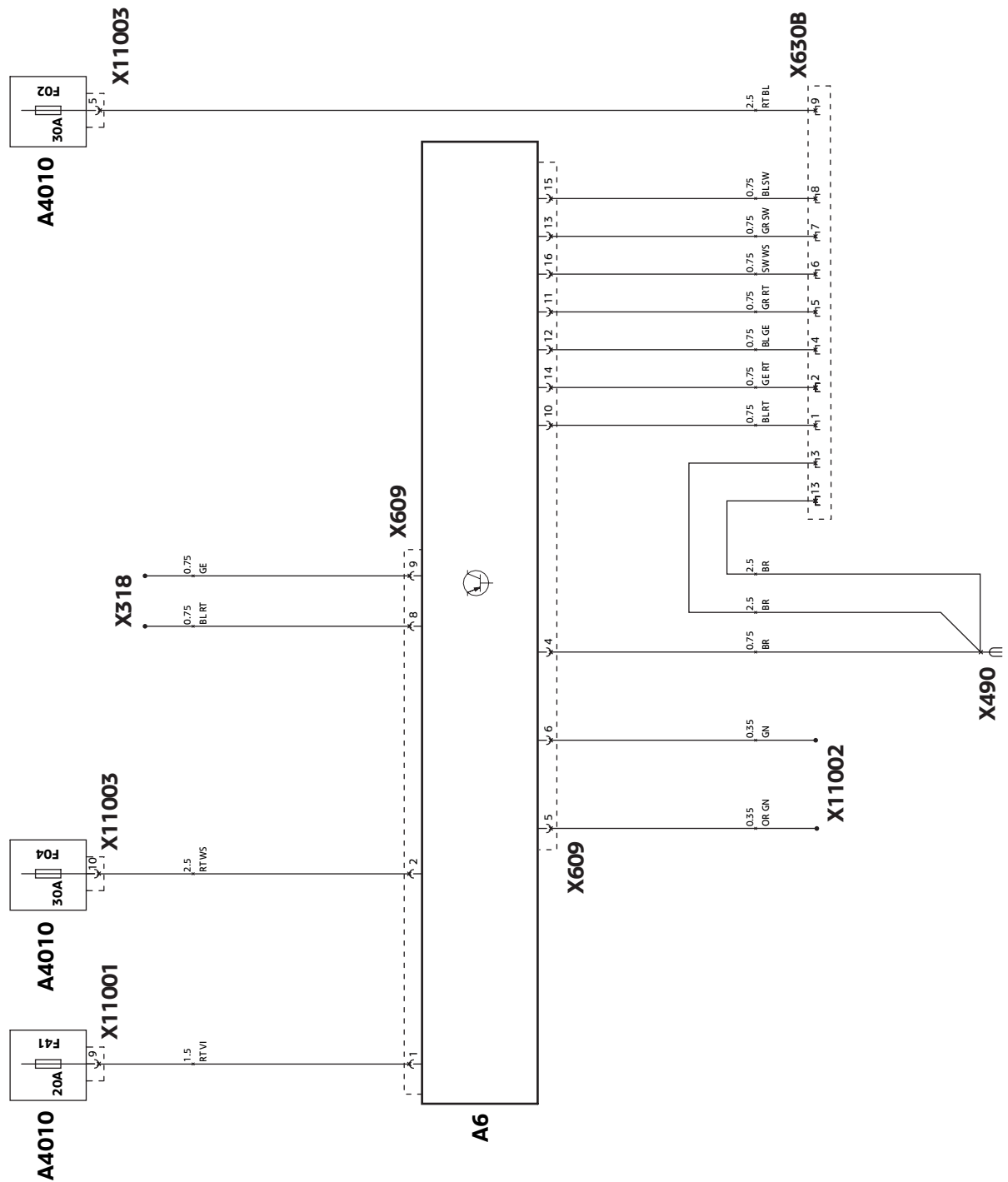
The inspection glass (2) is used for roughly determining the required initial stress:

- **Initial stress correct (3):** the bar appears in the lower half of the inspection window (2)
- **Initial stress too low (4):** the bar appears in the upper half of the inspection window (2)
- **Initial stress too high (5):** the bar appears in the lower half outside the inspection window (2)

The rear-mounted carrier must be mounted in the rear-mounted carrier brackets in order to determine the required initial stress.

 The customer must be shown how to fit and remove the rear-mounted carrier in accordance with the installation instructions. ◀

9. Circuit diagram (optional - only for extending the installation of electrical components)



9. Circuit diagram (optional - only for extending the installation of electrical components)

Key

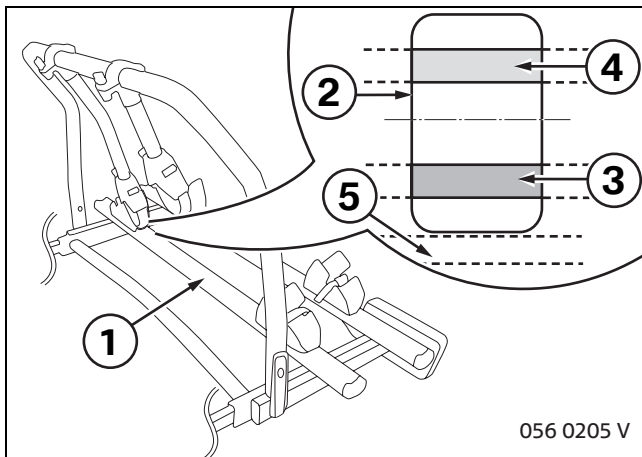
A4010	SPEG high
A6	AHM 3+ electronic control unit
X318	Right rear light plug
X490	Earth of right wheel arch
X609	Plug
X630B	Connector
X11001	Fuse distribution plug
X11002	Fuse distribution plug
X11003	Fuse distribution plug

All descriptions marked with * only apply to these installation instructions and this circuit diagram.

Cable colours

GE	Yellow	WS	White
GN	Green	OR	Orange
GR	Grey	BL	Blue
RT	Red	BR	Brown
SW	Black	VI	Violet

10. Checking adjustment of aluminium rear-mounted carrier

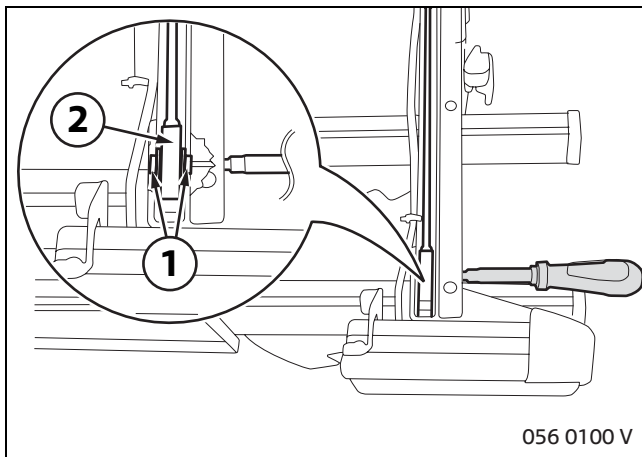


There is an inspection glass (2) on both sides below the rear wheel rail (1)

The inspection glass (2) is used for roughly determining the required initial stress:

- **Initial stress correct (3):** the bar appears in the lower half of the inspection window (2)
- **Initial stress too low (5):** the bar appears in the upper half of the inspection window (2)
- **Initial stress too high (4):** the bar appears in the lower half outside the inspection window (2)

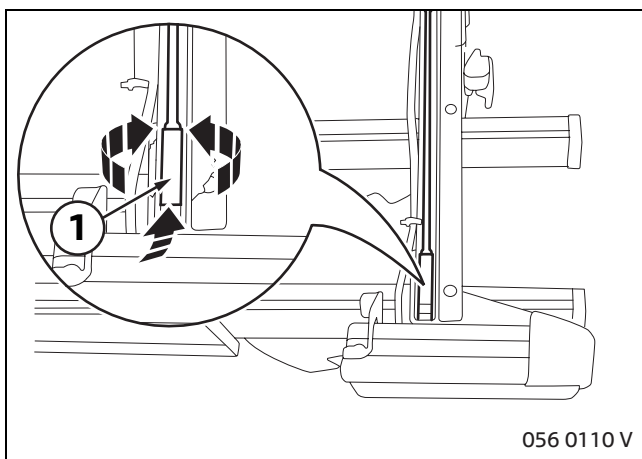
The rear-mounted carrier must be mounted in the rear-mounted carrier brackets in order to determine the required initial stress.



Adjust rear-mounted carrier if required as follows:

Loosen mounting bolts (1) and circlips of the sliding piece (2) on both sides with a socket wrench.

The left mounting bolt can be accessed through an opening in the rear-mounted carrier frame - the platform of the rear-mounted carrier must be closed to do this.



The sliding piece (1) can be lifted up out of the guide.

To increase the initial stress of the rear-mounted carrier in the bracket, the sliding piece (1) must be turned to the left. To reduce the initial stress, it must be turned to the right.

Then retighten the mounting bolts and circlips and check the play of the rear-mounted carrier brackets.

Repeat the adjustment as required.