## **ORIGINAL MINI ACCESSORIES.**

# INSTALLATION INSTRUCTIONS.



### Additional Headlight Retrofit

MINI Clubman (R55) MINI (R56) MINI Convertible (R57) MINI Coupé (R58) MINI Roadster (R59) MINI Countryman (R60)

#### Installation instructions only valid for US cars

#### **Retrofit kit number**

MINI Paceman (R61)

63 12 0 417 885	Additional headlight retrofit kit, black
63 21 0 420 292	Additional headlight retrofit kit, chrome
63 12 2 288 981	Additional headlight retrofit kit, LED chrome
63 12 2 288 982	Additional headlight retrofit kit, LED black

#### Installation time

The installation time is **approx. 2.5 hours**. This may vary depending on the condition of the vehicle and the equipment in it.

#### Important information

These installation instructions are primarily designed for use within the MINI dealership organisation and by authorised MINI 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, wiring diagrams, servicing manuals and work instructions, in a rational order, using the prescribed tools (special tools) and observing current health and safety regulations.

# If you experience installation or function problems, restrict troubleshooting to approx. 0.5 hours for mechanical work and 1.0 hour for electrical work.

To avoid unnecessary extra work and/or costs, send an inquiry straight away to the technical parts support team via the Aftersales Assistance Portal (ASAP).

Quote the following information:

- Chassis number,
- Retrofit kit part number,
- A detailed description of the problem,
- And any work already carried out.

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

#### **Pictograms**

Denotes instructions that draw your attention to dangers.

Denotes instructions that draw your attention to special features.

• Denotes the end of the instruction or other text.

#### Installation information

Ensure that the cables and/or lines are not kinked or damaged as you install them in the car. Costs arising from this will not be reimbursed by BMW AG.

Additional cables/wires 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 central radiator grille must be removed and replaced with the new central radiator grille **C** with the cutout for the holder.

On cars with the central radiator grille in the honeycomb or slatted design without chrome, no conversion work is required.

On cars with the central radiator grille in the slatted design with chrome, the chrome trims must be put into the new central radiator grille **C**.

After installation, the additional headlights must be adjusted.



- Note the ESD guidelines.
- Important information when installing the "chrome/black LED additional headlight" retrofit kit on cars with halogen low-beam headlights: If the LED additional headlight flashes several times inappropriately when the ignition is switched on, the control module bearing part number 63 12 2 289 191 must also be ordered and installed instead of the control module included with the kit. ◀

#### **Ordering instructions**

The following parts are not supplied in the retrofit kit and must be ordered separately (see EPC for part number and details):

- Holder and grille (contains the central radiator grille C, left holder E and right holder F)
- Additional headlight button retrofit kit

#### **Customer information**

Print out the **Customer information** section at the end of these installation instructions and give it to the customer.

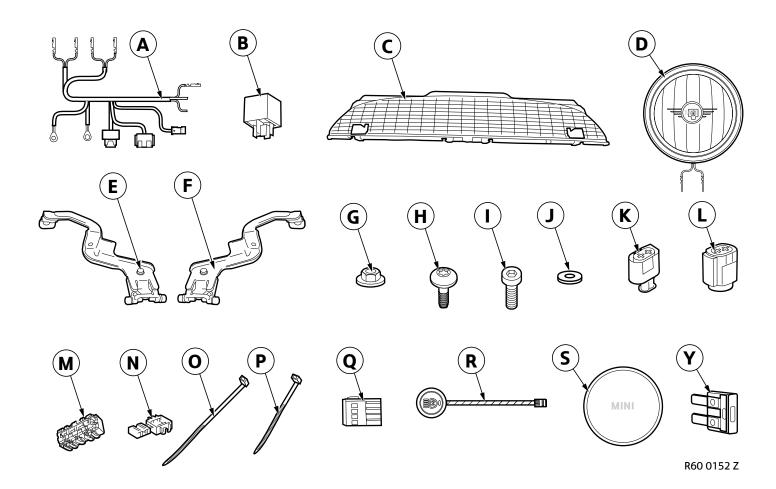
#### Special tools required

Details of the special tool required can be found in the relevant ISTA repair manual.

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Se	ction	Page
1.	Parts list for retrofit kit	4
2.	Preparatory work	. 5
3.	Retrofit wiring harness connection diagram	6
4.	Installation and cabling diagram	7
5.	Routing and connecting the wiring harness	8
6.	Installing the additional headlights holder	. 13
7.	Converting the radiator grille and installing the additional headlights	15
8.	Concluding work and coding	16
9.	Wiring diagram	. 17
10	.Customer information	18

#### 1. Parts list for retrofit kit



#### Legend

- A Wiring harness
- **B** Control unit
- C Radiator grille (part of the holder and grille retrofit kit)
- **D** Additional high-beam headlight (2 x)
- **E** Left holder (part of the holder and grille retrofit kit)
- F Right holder (part of the holder and grille retrofit kit)
- **G** Self-locking hexagon nut M8 (2 x)
- **H** M6 screw (2 x)
- M6 screw (4 x)
- **J** M6 shim (8 x)
- **K** SW 2-pin socket casing (2 x)
- L SW 2-pin plug casing (2 x)
- **M** 5-way miniature connector
- N 2-way miniature connector (2 x)
- O Cable tie  $445 \times 4.8 \text{ mm} (2 \times)$
- **P** Cable tie  $200 \times 3.6 \text{ mm} (25 \times)$
- **Q** BL 4-pin plug casing (part of the additional headlight button retrofit kit)
- **R** Button (part of the additional headlight button retrofit kit)
- **S** Headlight cover (2 x)
- Y 3 A blade terminal fuse (only in additional LED high-beam headlights retrofit kit)

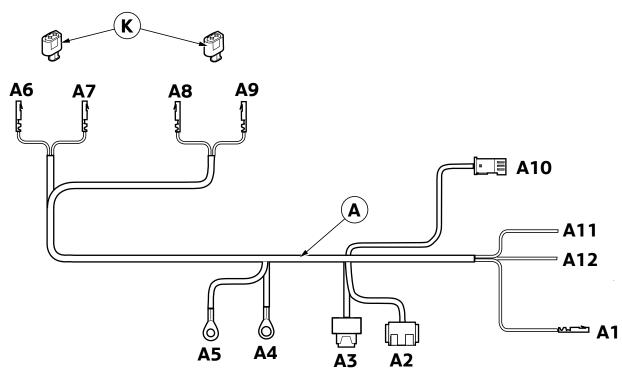
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## 2. Preparatory work

	ISTA No.
Disconnect the negative battery cable	61 20 900
The following components must be removed first of all	
Central radiator grille (no longer required)	51 13 000
Panel on central radiator grille (convert)	51 13 003
Bottom left dashboard trim	51 45 180
Knee protection on the driver's side	51 45 250
Front left door sill strip	51 47 000
Left cowl panel cover	51 13 123
Right cowl panel cover	51 13 124

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## 3. Retrofit wiring harness connection diagram

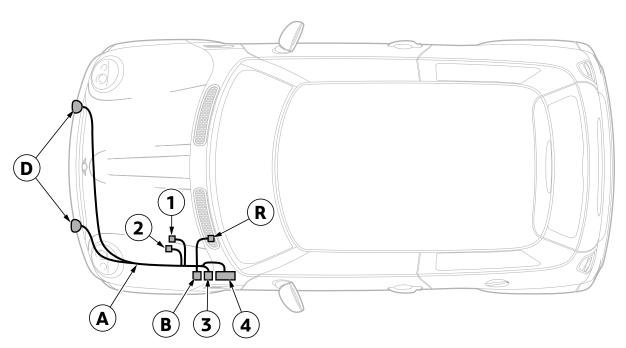


R56 0097 Z

Item	Designation	Signal	Cable colour/ cross-section	Connection location in the car	Abbreviation, slot
Α	Retrofit wiring harness				
A1	Socket contact	Termi- nal 56a	GE/BL 0.75 mm²	Only cars without xenon light Connect using miniature connector <b>M</b> to the GE/BL cable from the footwell module	X14260 PIN 4
				Only cars with xenon light Connect to the footwell module or with miniature connector <b>M</b> to the GE/RT cable from the footwell module	X14260 PIN 41
A2	SW 9-pin relay base			To control unit <b>B</b>	
А3	Fuse holder				
A4	M6 ring eyelet	Terminal 31	BR	To terminal 31 support point under the engine compartment fuse holder	X165
A5	M8 ring eyelet	Terminal 30	RT/BL 2.5 mm²	To terminal 30 support point in the engine compartment fuse holder	X2
A6	Socket contact	FSL	BL/RT 1.0 mm²	With socket casing <b>K</b> to plug casing <b>L</b> on left- hand additional high-beam headlight <b>D</b>	PIN 1
A7	Socket contact	Termi- nal 31L	BR 1.0 mm²	With socket casing <b>K</b> to plug casing <b>L</b> on left-hand additional high-beam headlight <b>D</b>	PIN 2
A8	Socket contact	FSR	BL/WS 1.0 mm²	With socket casing <b>K</b> to plug casing <b>L</b> on left- hand additional high-beam headlight <b>D</b>	PIN 1
A9	Socket contact	Termi- nal 31L	GB 1.0 mm²	With socket casing <b>K</b> to plug casing <b>L</b> on left- hand additional high-beam headlight <b>D</b>	PIN 2
A10	WS 4-pin socket casing			With plug casing <b>Q</b> to button <b>R</b>	
A11	Open cable	Termi- nal 58g	GR/RT 0.5 mm²	With miniature connector <b>N</b> to the GR/RT cable of the footwell module	X14261 PIN 48
A12	Open cable	Terminal 15	GR 0.75 mm <sup>2</sup>	With miniature connector <b>N</b> to the GR cable of the footwell module	X14261 PIN 12

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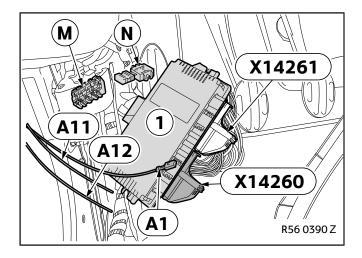
### 4. Installation and cabling diagram

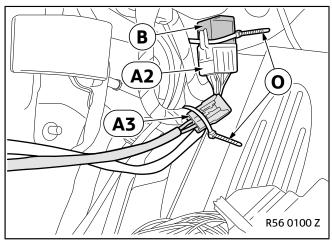


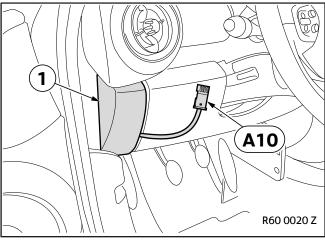
R56 0120 Z

- **A** Wiring harness
- **B** Control unit
- **D** Additional headlight
- **R** Button
- 1 Terminal 30 pick-up on terminal 30 support point, **X2**
- 2 Terminal 31 pick-up on terminal 31 support point, **X165**
- **3** Fuse holder **A3**
- 4 Footwell module, socket casing X14260 and X14261

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Release the footwell module (1) and socket casing **X14260** (51-pin SW/GR) (see ISTA no. 61 35 015).



The socket casing of X14260 and X14261 are both SW, the inner housing of the X14260 is grey. ◀

Connect branch A1 as follows to socket casing **X14260**:

#### Only cars without xenon light

Connect branch A1, GE/BL cable, using 5-way miniature connector M to the GE/BL cable of PIN 4.

#### Only cars with xenon light

Connect branch A1, GE/BL cable, to PIN 41.



If PIN 41 is already occupied, connect branch **A1** using 5-way miniature connector **M**. ◀

#### All cars

Connect branches **A11** and **A12** as follows using 2-way miniature connectors **N** to socket casing **X14261**:

- Branch A11, GR/RT cable, to GR/RT cable from PIN 48
- Branch A12, GR cable, to GR cable from PIN 12



Failure to observe the instructions regarding ESD (electrostatic discharge) protection as per ISTA RA 61 35 ... can damage control unit **B**. ◀

Connect control unit **B** to branch **A2** (SW 9-pin relay base).

Secure branch **A2** and branch **A3** (fuse holder) to the standard wiring harness in the footwell on the driver's side using cable ties **O**.

#### Only in the case of the additional LED highbeam headlight retrofit kit

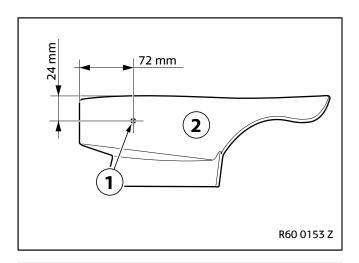
Replace the existing 15 A blade terminal fuse on branch **A3** with 3 A blade terminal fuse **Y**.

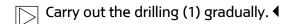
#### R6x cars only

Uninstall the standard finisher on the driver's side (1).

Route branch **A10** (WS 4-pin socket casing) to the installation location for the driver's side finisher (1).

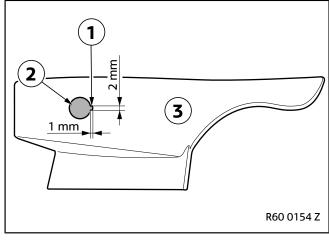
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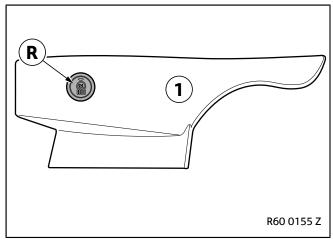


Draw on the drilling point (1) on the driver's side finisher (2) as per the dimensions.

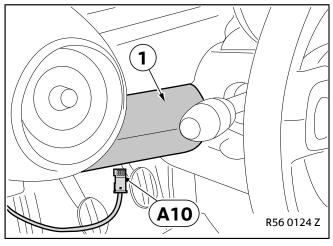
Drill through the drilling point (1) with a 14 mm diameter drill bit.



File out the cut-out (1) on the drill hole (2) as per the dimensions on driver's side finisher (3).



Clip button **R** into the driver's side finisher (1).

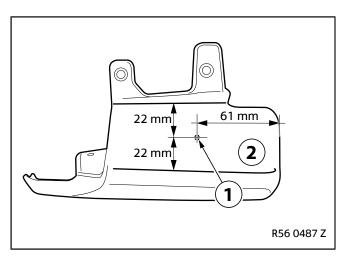


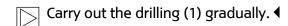
#### **R5x cars only**

Uninstall the knee protection on the driver's side (1).

Route branch **A10** (WS 4-pin socket casing) to the installation location for the knee protection on the driver's side (1).

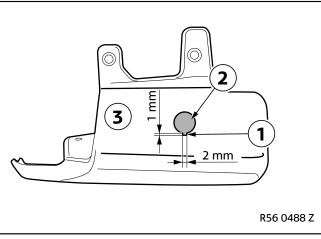
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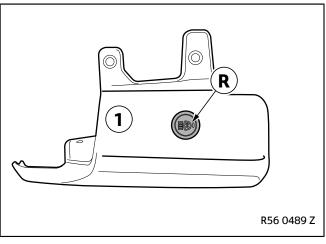


Draw on the drilling point (1) on the driver's side knee protection (2) as per the dimensions.

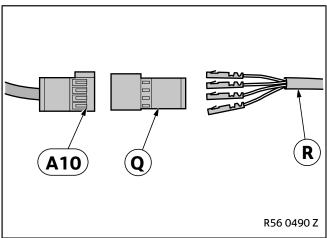
Drill through the drilling point (1) with a 14 mm diameter drill bit.



File out the cut-out (1) on the drill hole (2) as per the dimensions on driver's side knee protection (2).



Clip button **Q** into the driver's side knee protection (1).



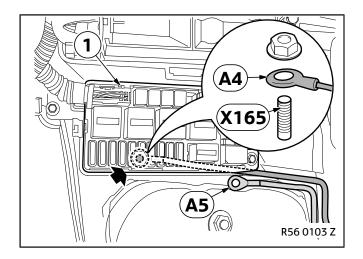
#### All cars

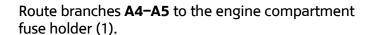
Connect the branches of button  ${\bf R}$  as follows to plug casing  ${\bf Q}$ :

- RT cable to PIN 1
- BR cable to PIN 2
- GN cable to PIN 3
- BL cable to PIN 4

Connect plug casing **Q** to branch **A10**.

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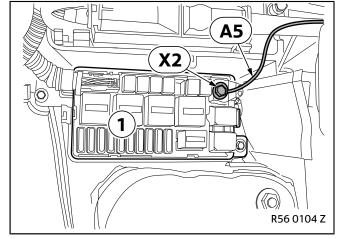




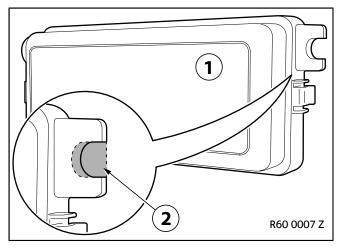
Loosen the engine compartment fuse holder (1) and fold it out of the way.

Screw branch **A4** (M6 ring eyelet) to terminal 31 support point **X165**.

Connect the engine compartment fuse holder (1).

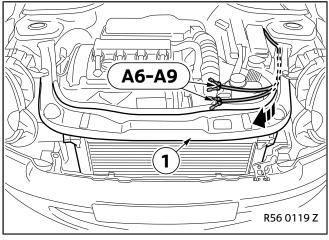


Screw branch **A5** (M8 ring eyelet) to terminal 30 support point **X2** of the engine compartment fuse holder (1).



Mill out the engine compartment fuse holder (1) in the area marked (2) accordingly.

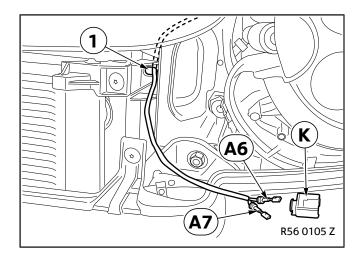
Install the cover for the engine compartment fuse holder (1).



Route branches **A6–A9** along the standard wiring harness to the front end (1).

Seal the cable ducts.

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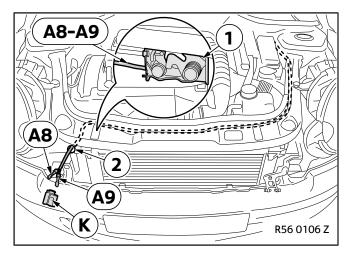
Route branches **A6–A7** through the opening (1) in the front end.

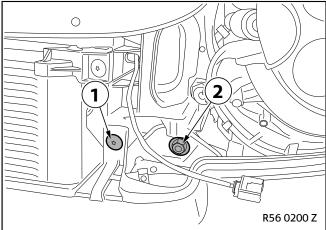
Connect branches **A6** and **A7** to socket casing **K** (SW 2-pin) as follows:

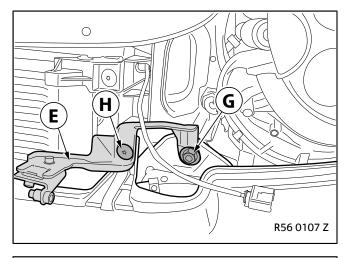
- Branch A6, BL/RT cable, to PIN 1
- Branch A7, BR cable, to PIN 2

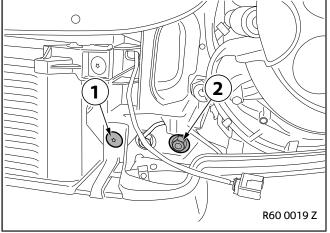
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### 6. Installing the additional headlights holder

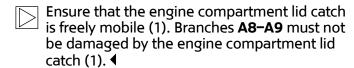








Route branches **A8–A9** along the bonnet release guide through the opening (2) in the front end.



Connect branches **A8** and **A9** to socket casing K (SW 2-pin) as follows:

- Branch A8, BL/WS cable, to PIN 1
- Branch A9, BR cable, to PIN 2

#### R5x cars only

Remove the standard screw connections from the bumper trim (1) and support (2), they are no longer required.

Proceed in exactly the same way on the right-hand side.

The tightening torque of hexagon nut **G** is 22 Nm. •

Screw on left holder **E** using hexagon nut **G** and screw **H**.

Proceed in exactly the same way for right-hand holder **F**.

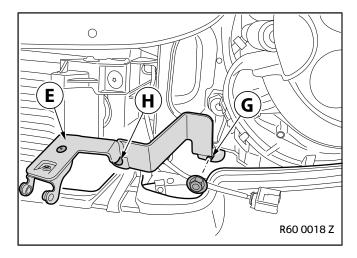
#### R6x cars only

Remove the standard screw connections from the bumper trim (1) and support (2), they are no longer required.

Proceed in exactly the same way on the right-hand side.

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## 6. Installing the additional headlights holder



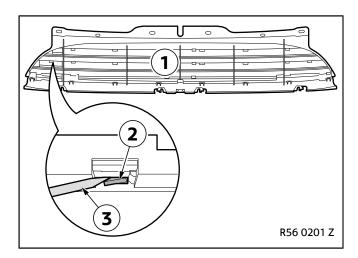
The tightening torque of hexagon nut **G** is 22 Nm. ◀

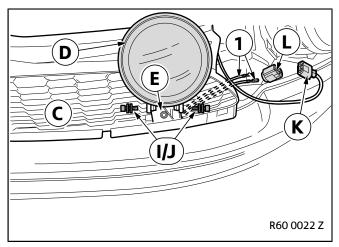
Screw on left holder  ${\bf E}$  using hexagon nut  ${\bf G}$  and screw  ${\bf H}.$ 

Proceed in exactly the same way for right-hand holder  ${\bf F}.$ 

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### 7. Converting the radiator grille and installing the additional headlights





#### R5x cars with radiator grille in chrome only



In order to avoid damage to the chrome bars, place the central radiator grille (1) on a protective cloth. ◀

Remove the adhesive strips on the retaining lugs (2) using a screwdriver (3).



Carefully push the retaining lugs (2) downwards and remove the chrome bars from the radiator grille (1). ◀

Fit the chrome bars onto central radiator grille **C**. To secure them in place, apply hot glue to the retaining lugs (2).

#### All cars

Apply the decorative strip to central radiator grille **C** and loosely push it into place.

First loosely screw on left-hand additional headlight **D** into the final fitting position using screws **I** and 2 shims **J** each.

Route the connecting cable (1) below holder **E** through central radiator grille **C** to socket casing **K**.

Connect connecting cable (1) of left-hand additional headlight **D** as follows to plug casing **L** (SW 2-pin):

- Cable, VI/SW cable, to PIN 1
- Cable, BR cable, to PIN 2

Connect plug casing L to socket casing K.

Proceed in exactly the same way for the right-hand headlight **D**.

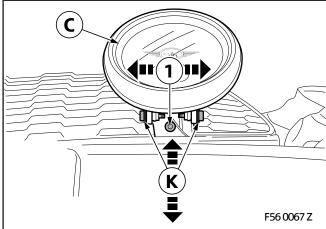
Secure central radiator grille **C** in place.

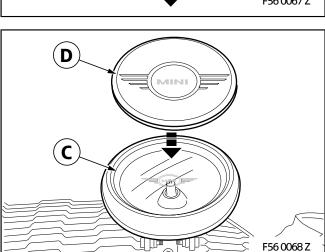
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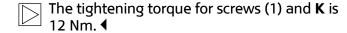
### 8. Concluding work and coding

The retrofit system does not require programming / coding.

- Connect the battery
- Conduct a function test
- Re-assemble the car in a logical manner
- Give the customer the customer information







Adjust additional headlight **C** as follows with the headlight adjustment tool:

#### Vertical adjustment

Loosen the screw (1) and adjust the vertical setting

#### Horizontal adjustment

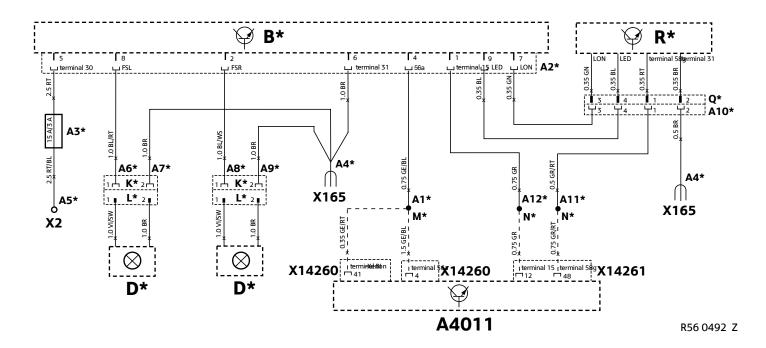
Loosen both screws  ${\bf K}$  and adjust the horizontal setting

Risk of damage from overheating. Never use additional headlight **C** when cover caps **D** are fitted. ◀

Place cover caps **D** on additional headlights **C**.

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#### Wiring diagram 9.



#### Legend

A1*	Socket contact
A2*	SW 9-pin relay base
A3*	Fuse holder
A4*	M6 ring eyelet
A5*	M8 ring eyelet
A6*	Socket contact
A7*	Socket contact
A8*	Socket contact
A9*	Socket contact
A10*	WS 4-pin socket casi

WS 4-pin socket casing

Open cable A11\* A12\* Open cable Control unit **B**\*

D\* Additional headlight **K**\* SW 2-pin socket casing L\* SW 2-pin plug casing М\* 2-way miniature connector **N**\* 5-way miniature connector Q\* BL 4-pin plug casing

R\* **Button** 

A4011 Footwell module

**X2** Terminal 30 support point in the engine compartment fuse holder X165 Terminal 31 support point under the engine compartment fuse holder

X14620 SW/GR 51-pin socket casing X14621 SW 51-pin socket casing

All the designations marked with \* apply only to these installation instructions or this wiring diagram.

#### **Cable colours**

BL	Blue	GR	Grey	RT	Red
ВО	Bordeaux (Burgundy)	L-GN	Light green	SW	Black
BR	Brown	NT	Natural	TR	Transparent
GE	Yellow	OR	Orange	VI	Violet
GN	Green	RO	Pink	WS	White

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#### 10. Customer information

#### **Explanation of pictograms**

Denotes instructions that draw your attention to dangers.

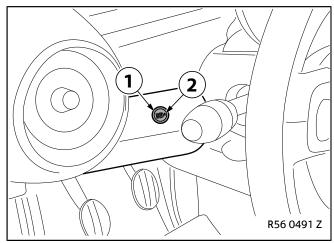
Denotes instructions that draw your attention to special features.

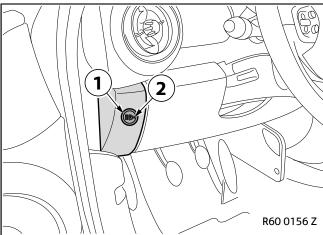
Denotes the end of the instruction or other text.

#### Risk of damage from overheating! Never use the additional headlights when the headlight covers are fitted. ◀

The additional headlights should exclusively be used off-road.

Use on public roads, motorways or country roads might be illegal in your country. Depending on the legal situation, it may be a requirement for you to cover your additional headlights when driving on public roads, motorways or country roads. Before using your additional headlights, please check with the responsible public authority what are the regulations governing correct use.





#### Operating the additional headlights



Once activated, the additional headlights light up automatically when the headlights or headlight flash are switched on. Whenever you turn the ignition off/on, you must re-activate the additional headlights.

The top figure shows R5x cars. The figure below shows R6x cars. ◀

#### Switching the additional headlights on automatically

- Switch on the ignition or start the engine
- Press the button (1) to activate
- The additional headlights are activated when the green control light (2) lights up in the button
- Switch the headlights on or actuate the headlight flash

The additional headlights light up along with the headlights or headlight flash

### Switching the additional headlights on manually

- Switch on the ignition or start the engine
- Switch the headlights on or actuate the headlight flash
- Press the button (1) to switch on the additional headlights

The additional headlights light up along with the headlights or headlight flash

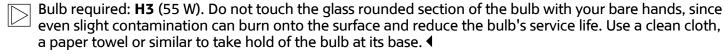
#### Switching off the headlights

Switch off the headlights or press the button (1) again.

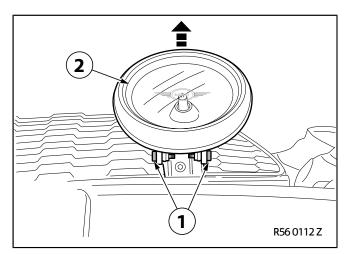
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#### Changing bulb (only for additional headlights with halogen bulbs)

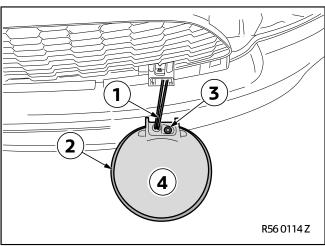
Lamps and lights are an important part of the car's safety features. Appropriate care should therefore be used when handling them. If you are not familiar with such work, have it performed by your MINI service centre.



When carrying out any work on the car's electrical system, switch off the device you are working on or disconnect the battery's negative terminal, otherwise you may cause a short-circuit. Always read any instructions provided by the bulb's manufacturer in order to avoid injury and/or damage when changing the bulb. ◀

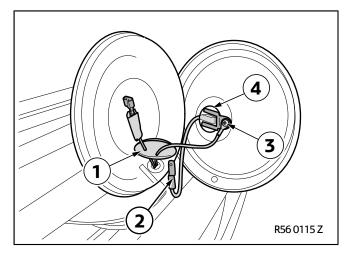


Unscrew both screws (1) and pull the additional headlight (2) carefully forwards.



In order to avoid damaging the cable (1), hold the additional headlight (2) with one hand.

Unscrew the Allen screw (3) and remove the housing (4).



The tightening torque for the screws is 12 Nm.

The position of the additional headlight must

be adjusted after the bulb has been changed.

Remove the rubber cap (1) and disconnect the plug (2).

Loosen the screw (3), remove it and change the bulb (4).

The headlight is reassembled in the reverse order.

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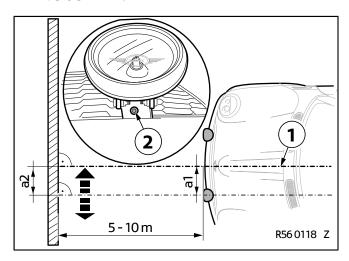
#### Adjusting the additional headlights

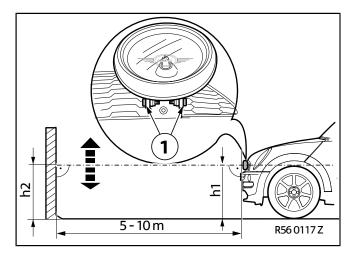
 $\triangleright$ 

Have the additional headlights adjusted by your MINI dealer.

If you are unable to visit your MINI dealer, you can temporarily adjust the additional headlights yourself even without the headlight adjusting tool. The steps for how to do this are described using the example of the left-hand additional headlight. The right-hand additional headlight is adjusted in exactly the same way.

To adjust the headlights, park your unladen car on even ground and around 5 - 10 m perpendicularly to a vertical wall. ◀





#### Testing the vertical setting



The tightening torque for the screw (2) is 12 Nm. ◀

- Measure the distance a1 from the centre of the additional headlight to the centre of the vehicle's longitudinal axis (1)
- Measure the distance a2 from the centre of the cone of light on the wall to the extension of the vehicle's longitudinal axis (1)

If distances **a1** and **a2** are not identical, adjust the vertical position as follows:

#### Adjusting the vertical position

- Loosen the screw (2) and rotate the additional headlight so that distances a1 and a2 are the same
- Tighten the screw (2) to 12 Nm

#### Testing the horizontal setting



The tightening torque for the screw (1) is 12 Nm. ◀

- Measure the height h1 from the centre of the additional headlight to the floor
- Measure the height h2 from the centre of the cone of light on the wall to the floor

If heights **h1** and **h2** are not identical, adjust the horizontal position as follows:

#### Adjusting the horizontal position

- Loosen both screws (1) and rotate the additional headlights so that heights h1 and h2 are the same
- Tighten the screws (1) to 12 Nm

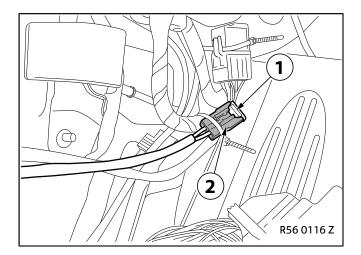
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#### Changing the fuse

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When carrying out any work on the car's electrical system, switch off the device you are working on or disconnect the battery's negative terminal, otherwise you may cause a short-circuit. ◀

Do not repair a burnt-out fuse or replace it with a fuse of another colour or Ampere rating, since overloaded electrical cables could cause a fire in the car.



# Fuse required (1): 15 A (3 A in the case of the LED additional headlight).

The fuse (1) for the additional headlights is located in the footwell on the driver's side, behind the side trim.

Remove and change the fuse (1) from the fuse holder (2).

If the fuse (1) blows repeatedly, have your MINI service centre investigate the cause.

#### Cleaning and care

Use a soft damp cloth to clean the additional headlights. Do not use abrasive or corrosive cleaning agents.

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