Retrofit additional headlights
MINI ONE (R 56)
MINI COOPER (R 56)
MINI COOPER S (R 56)

Retrofit Kit No.:
63 12 0 417 885  Retrofit additional headlights black US
63 12 0 420 292  Retrofit additional headlights chrome US
63 13 0 422 704  Supplementary kit, front centre grille, Cooper S
63 13 0 422 706  Supplementary kit, front centre grille, Cooper S with aerodynamics package SZ
63 13 0 422 707  Supplementary kit, front centre grille, Cooper chrome
63 13 0 422 708  Supplementary kit, front centre grille, Cooper S with aerodynamics package SZ
63 13 0 427 567  Supplementary kit, front centre grille, MINI Diesel
63 13 0 427 568  Supplementary kit, front centre grille, MINI One
63 13 0 427 569  Supplementary kit, front centre grille, Cooper with aerodynamics package SAZ

Installation time
The installation time is **approx. 1.25 hours**. This may vary depending on the condition of the car 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, circuit diagrams, servicing manuals and work instructions, in a rational order, using the prescribed tools (special tools) and observing current health and safety regulations.

In the event of any installation or function problems, restrict the troubleshooting session to about 0.5 hours for mechanical work or 1.0 hour for electrical work.

In order to reduce costs and avoid any additional expense, send a query immediately to the Technical Parts Support via the Aftersales Assistance Portal (ASAP).

Specify the following information:
- Chassis number
- Part number of the retrofit kit
- A precise description of the problem
- Work steps already carried out

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.

Print out the "Customer information" chapter at the end of the installation instructions and give it to the customer.

Do not archive the hard copy of these installation instructions since daily updates are made by ASAP!
Installation information
The front centre grille is to be removed and replaced with the new front centre grille C with cut-out for holder. No modifications are required for cars with front centre grille in honeycomb or array design without chrome. The chrome trim in the new front centre grille C must be modified for cars with front centre grille in array design chrome.
All pictures show LHD cars; proceed accordingly on RHD cars.
Ensure that the cables and/or lines are not kinked or damaged as you install them in the car. The costs thereby incurred will not be reimbursed by BMW AG.
Additional cables/lines that you install must be secured with cable ties.

Ordering instructions
The following parts are not supplied in the retrofit kit and must be ordered separately (see EPC for part number and details).
- Supplementary kit, front centre grille (contains centre front grille C, holder left E and holder F right)
- Driver’s side knee protection Q

Special tools required
None
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1. Parts list

Legend

A  Cable kit
B  Control module
C  Front centre grille (not supplied with the retrofit kit)
D  Additional headlights (2x)
E  Left bracket (not supplied with the retrofit kit)
F  Right bracket (not supplied with the retrofit kit)
G  Hexagonal nut M8, self-locking (2x)
H  Screw M6 (2x)
I  Screw M6 (4x)
J  Washer M6 (3x)
K  Black 2-pin socket casing (2x)
L  Black 2-pin plug casing (2x)
M  5-way miniature connector (1x)
N  2-way miniature connector (2x)
O  Cable tie 445 x 4.8 mm (2x)
P  Cable tie 200 x 3.6 mm (25x)
Q  Knee protection, driver’s side (not supplied with the retrofit kit)
R  Button
S  Headlight cover (2x)
## 2. Preparatory work

<table>
<thead>
<tr>
<th>Description</th>
<th>TIS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct a brief test</td>
<td>---</td>
</tr>
<tr>
<td>Disconnect negative pole of battery</td>
<td>12 00 ...</td>
</tr>
<tr>
<td><strong>The following components must be removed first of all</strong></td>
<td></td>
</tr>
<tr>
<td>Centre front grille (no longer required)</td>
<td>51 13 000</td>
</tr>
<tr>
<td>Trim on front centre grille (fit on new grille)</td>
<td>51 13 003</td>
</tr>
<tr>
<td>Trim at the bottom left of the instrument panel</td>
<td>51 45 180</td>
</tr>
<tr>
<td>Knee protection, driver’s side (US cars only, no longer required)</td>
<td>51 45 250</td>
</tr>
<tr>
<td>Front left door sill strip</td>
<td>51 47 000</td>
</tr>
<tr>
<td>Windscreen panel cover, left</td>
<td>51 13 123</td>
</tr>
<tr>
<td>Windscreen panel cover, right</td>
<td>51 13 124</td>
</tr>
</tbody>
</table>
### 3. Connection diagram

![Connection Diagram](image)

<table>
<thead>
<tr>
<th>Branch/Item</th>
<th>Designation</th>
<th>Signal</th>
<th>Cable colour/ Cross-section</th>
<th>Connection location in car</th>
<th>Abbreviation/ Slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Cable kit</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>A1</td>
<td>Socket contact</td>
<td>Terminal 56a</td>
<td>GE/BL 0.75 mm²</td>
<td><strong>Cars without Xenon lights only</strong>&lt;br&gt;With miniature connector M to GE/BL cable from footwell module&lt;br&gt;&lt;br&gt;<strong>Cars with Xenon lights only</strong>&lt;br&gt;Insert in footwell module</td>
<td>X14260 PIN 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>9-pin relay socket SW</td>
<td>---</td>
<td>---</td>
<td>To control module B</td>
<td>---</td>
</tr>
<tr>
<td>A3</td>
<td>Fuse holder</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>A4</td>
<td>Eyelet M6</td>
<td>Terminal 31</td>
<td>BR</td>
<td>Service point terminal 31 under engine compartment fuse holder</td>
<td>X165</td>
</tr>
<tr>
<td>A5</td>
<td>Eyelet M8</td>
<td>Terminal 30</td>
<td>RT/BL 2.5 mm²</td>
<td>Service point terminal 30 under fuse holder, engine compartment</td>
<td>X2</td>
</tr>
<tr>
<td>A6</td>
<td>Socket contact</td>
<td>FSL</td>
<td>BL/RT 1.0 mm²</td>
<td>With socket casing K on plug casing L of the left additional headlight D</td>
<td>PIN 1</td>
</tr>
<tr>
<td>A7</td>
<td>Socket contact</td>
<td>Terminal 31L</td>
<td>BR 1.0 mm²</td>
<td>With socket casing K on plug casing L of the left additional headlight D</td>
<td>PIN 2</td>
</tr>
<tr>
<td>A8</td>
<td>Socket contact</td>
<td>FSR</td>
<td>BL/WS 1.0 mm²</td>
<td>With socket casing K on plug casing L of the right additional headlight D</td>
<td>PIN 1</td>
</tr>
<tr>
<td>A9</td>
<td>Socket contact</td>
<td>Terminal 31L</td>
<td>BR 1.0 mm²</td>
<td>With socket casing K on plug casing L of the right additional headlight D</td>
<td>PIN 2</td>
</tr>
<tr>
<td>A10</td>
<td>White 4-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>To pushbutton R</td>
<td>---</td>
</tr>
<tr>
<td>A11</td>
<td>Cable open</td>
<td>Terminal 58g</td>
<td>GR/RT 0.5 mm²</td>
<td>With miniature connector N to GR/RT cable from footwell module</td>
<td>X14261 PIN 48</td>
</tr>
<tr>
<td>A12</td>
<td>Cable open</td>
<td>Terminal 15</td>
<td>GR 0.75 mm²</td>
<td>With miniature connector N to GR cable from footwell module</td>
<td>X14261 PIN 12</td>
</tr>
</tbody>
</table>
4. Installation and cabling diagram

Legend

A  Cable kit
B  Control module
D  Auxiliary headlights
R  Pushbutton (not for US cars)

1  Tap terminal 30 on service point terminal 30, **X2**
2  Tap terminal 31 on service point terminal 31, **X165**
3  Fuse holder **A3**
4  Footwell module, socket casing **X14260**
5. To install and connect the cable kit

Release footwell module (1) and socket casing X14260 (51-pin SW/GR).

The socket casings from X14260 and X14261 are both black, the interior casing of the X14260 is grey.

Connect branch A1 as follows to socket casing X14260:

Cars without Xenon lights only
- Connect branch A1, GE/BL cable, using 5-way miniature connector M to GE/BL cable from PIN 4

Cars with Xenon lights only
- Connect branch A1, GE/BL cable, to PIN 4

All cars
Connect branches A11 and A12 using 2 miniature connectors N to the socket casing X14261 as follows:
- 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 electrostatic discharge (ESD) instructions according to TIS RA 61 35 can result in damage to the control unit B.

Plug control unit B into branch A2 (9-pin relay socket).

Attach branch A2 and branch A3 (fuse holder) with cable ties O to vehicle wiring harness in footwell on driver’s side.

Remove the knee protection on driver’s side (1) (no longer required).

Route branch A10 (4-pin WS socket casing) to the mounting location of the driver’s side knee protection (1).
5. To install and connect the cable kit

Insert pushbutton R into driver’s side knee protection Q as shown.

Connect branch A10 (4-pin WS socket casing) on pushbutton R and fit driver side knee protection Q.

Route branches A4-A9 from the inside of the car through rubber grommet (1) into the engine compartment.

Route branches A4-A5 to the fuse holder in engine compartment (1).

Unscrew the engine compartment fuse holder (1) and fold it back.

Screw branch A4 (eyelet M6) to service point terminal 31 X165.

Screw the engine compartment fuse holder (1) back into place.

Screw branch A5 (M8 eyelet) to service point terminal 30 X2 of the engine compartment fuse holder (1).
5. To install and connect the cable kit

Route branches A6-A9 along the standard wiring harness to the front panel (1).

Route branches A6-A7 through the opening (1) in the front panel.

Connect branches A6 and A7 as follows to socket casing K (2-pin SW):
- Branch A6, BL/RT cable, to PIN 1
- Branch A7, BR cable, to PIN 2

Route branches A8-A9 along the bonnet closing panel and through the opening (2) in the front panel.

Make sure the bonnet catch (1) is not trapped. Branches A8-A9 must not be damaged by the bonnet catch (1).

Connect branches A8 and A9 as follows to socket casing K (2-pin SW):
- Branch A8, BL/WS cable, to PIN 1
- Branch A9, BR cable, to PIN 2
6. To install the additional headlight holders

Undo bolts holding bumper trim (1) and support (2) to vehicle and discard.
Proceed in exactly the same way on the right-hand side.

The tightening torque of the hexagonal nut G is 22 Nm.

Secure the left-side holder E using hexagonal nut G and bolt H.
Carry out same procedure for right-side holder F.
7. To modify the front grille and install the additional headlights

**Cars with front grille in chrome only**

- To prevent any damage to the chrome trim, place the front centre grille (1) on a protective cover.
- Use a screwdriver (3) to remove the glue from the retaining lugs (2).
- Carefully push the retaining lugs (2) downwards and remove the chrome trim from the front grille (1).
- Clip the chrome trim into the new front centre grille C.
- Use adhesive (Sika-Flex) to secure the retaining lugs (2).

**All cars**

- Attach decorative strip to centre front grille C and loosely push into place.
- Loosely attach left additional headlight D with bolts I and 2 washers J.
- Route the connecting cable (1) under the holder E through the front centre grille C to the socket casing K.
- Connect the cable (1) from the left additional headlight D as follows to the plug casing L (2-pin SW):
  - Cable, VI/SW cable colour, to PIN 1
  - Cable, BR cable colour, to PIN 2
- Connect plug L to socket casing K.
- Carry out same procedure for right-side headlight D.
- Secure the front centre grille C.
8. Concluding work and coding

This retrofit system does not require coding.
- Connect the battery
- Conduct a brief test
- Conduct a function test
- Re-fit the car components as required
- Print out section 9 of these installation instructions and give it to the customer.

Adjust the additional headlight D as follows using headlight adjustment unit:

**Vertical adjustment**
- Loosen screw (1) and make vertical adjustment

**Horizontal adjustment**
- Loosen both screws I and make horizontal adjustment

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

Tighten screws (1) and I.

Fit headlight covers S to the additional headlights D.

Risk of damage by overheating. Never use the additional headlights D when the headlight covers S are fitted.
9. Circuit diagram

Legend

A4011  Footwell module
A1*    Socket contact
A2*    9-pin relay socket SW
A3*    Fuse holder
A4*    Eyelet M6
A5*    Eyelet M8
A6*    Socket contact
A7*    Socket contact
A8*    Socket contact
A9*    Socket contact
A10*   White 4-pin socket casing
A11*   Cable open
A12*   Cable open

B*      Control module

D*      Auxiliary headlights

K*      Black 2-pin socket casing

L*      Black 2-pin plug casing

M*      5-way miniature connector

N*      2-way miniature connector
9. Circuit diagram

Legend

R* Button

X2 Service point terminal 30 under fuse holder, engine compartment
X165 Service point terminal 31 under engine compartment fuse holder
X14260 51-pin SW/GR socket casing
X14261 Black 51-pin socket casing

All the designations marked with an asterisk (*) apply only to these installation instructions or this circuit diagram.

Cable colours

BL Blue
BR Brown
GE Yellow
GR Grey
SW Black
RT Red
VI Violet
WS White
10. Customer information for the additional headlights

Print out this customer information and give it to the customer.

Pictograms

⚠ Denotes instructions that draw your attention to dangers.

🚀 Denotes instructions that draw your attention to special features.

닫 Denotes the end of the instruction or other text.

Operation of the additional headlights

Switching on additional headlights automatically

⚠ Once they have been activated, the additional headlights come on automatically with the headlight main beam or the headlamp flasher. As soon as you have switched the ignition off/on again, you must reactivate the additional headlights. ⚠
- Switch on the ignition or start the engine
- Press the button (1) for activation

The additional headlights are now activated when the green light (2) in the pushbutton (1) is lit.
- Switch on the headlights or operate the headlamp flasher

The additional headlights now come on automatically with the headlight main beam or the headlamp flasher.

Switching on additional headlights manually:

- Switch on the ignition or start the engine
- Switch on the headlights or operate the headlamp flasher
- Press the button (1) to switch on lights

The additional headlights now come on automatically with the headlight main beam or the headlamp flasher.

Switching off additional headlights:

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

⚠ Pay attention to the relevant national and regional laws governing the use of additional headlights. For example, some states prohibit the simultaneous use of four lights, others completely ban their use on public highways and require that additional headlights are fitted with covers when not in use. ⚠

⚠ Risk of damage by overheating. Never use the additional headlights when the headlight covers are fitted. ⚠
10. Customer information for the additional headlights

Changing light bulbs
Lamps and lights are an essential element of vehicle safety. Appropriate care should therefore be applied in their use. If you are not familiar with such work, have it done by your local MINI Service.

⚠️ Bulbs required: **H3 (55 W)**. Never touch the glass of the bulbs directly with your fingers as even the slightest impurities will burn into the surface and reduce the life of the bulb. Always use a clean cloth, paper towel etc. or hold the base of the bulb.

⚠️ Whenever working on the electrical systems of your car, switch off the appropriate circuit or disconnect the negative terminal of the battery, otherwise there is a risk of short circuits. Always read the instructions supplied by the bulb manufacturer in order to avoid injury or damage when replacing bulbs.

Undo both screws (1) and carefully pull the auxiliary headlight (2) forwards.

To prevent damage to the cable (1), hold the additional headlight (2) in one hand.

Undo and remove the Allen screw (3) and remove the casing (4).

Pull off the rubber cover (1) and disconnect the plug (2).

Undo and remove the screw (3), and replace the bulb (4).

Re-assembly is carried out correspondingly in reverse order.

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

After changing the bulb, it is necessary to adjust the additional headlight.
10. Customer information for the additional headlights

Adjusting the additional headlights

If you choose not to have your MINI Service adjust the headlights, you can perform this adjustment yourself without a headlight adjustment unit. The operations described refer to the left headlight, but the adjustment of the right headlight is performed in the same way.

To perform the adjustment, position your unladen vehicle on level ground and about 5 – 10 m away from, and at right angles to, a vertical wall, door etc.

Checking vertical adjustment

- Measure the distance \(a_1\) from the centre of the headlight to the longitudinal axis of the car (1).
- Measure the distance \(a_2\) from the centre of the headlight to the longitudinal axis of the car (1).

If the distances \(a_1\) and \(a_2\) are not identical, carry out the vertical adjustment as follows:

Performing vertical adjustment

- Loosen the screw (2) and turn the additional headlight slightly to the right or left until the distances \(a_1\) and \(a_2\) are identical.
- The tightening torque of the screw (2) is 12 Nm.
- Tighten the screw (2) with 12 Nm.

Checking horizontal adjustment

- Measure the height \(h_1\) from the centre of the additional headlight to the ground.
- Measure the height \(h_2\) from the centre of the light beam on the wall to the ground.

If the heights \(h_1\) and \(h_2\) are not identical, carry out the horizontal adjustment as follows:

Performing horizontal adjustment

- Loosen both screws (1) and raise or lower the additional headlights until the heights \(h_1\) and \(h_2\) are identical.
- The tightening torque of the screw (2) is 12 Nm.
- Tighten the screws (1) with 12 Nm.
10. Customer information for the additional headlights

Changing the fuse

Whenever working on the electrical systems of your car, switch off the appropriate circuit or disconnect the negative terminal of the battery, otherwise there is a risk of short circuits.

Never try to repair a blown fuse or replace it with one of another colour or Amp rating, otherwise you could cause a fire in the car by overloading the electrical circuits.

Fuse required (1): 15 A

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

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

If the fuse blows again, take the car to your MINI Service to investigate the cause of the fault.

Cleaning and maintenance

Use a soft damp cloth for cleaning the additional headlight and avoid using any abrasive or chemical cleaning agents.