

Parts and Accessories.

Installation instructions.



Retrofit Kit - Bi-Xenon Headlight BMW 5 Series Saloon (E60)

Installation instructions valid only for vehicles with SA 502 (headlight washer system) and without SA 610 (head-up display).

Retrofit kit No.: 63 12 0 398 577

Installation time

The installation time of approx. 4.0 hours can vary depending on the condition and equipment of the vehicle.

Important information

These installation instructions are mainly intended for use in the BMW dealership network as well as by authorised BMW Service Centres.

The target group of these installation instructions are technical personnel trained on BMW vehicles with corresponding technical know-how.

All work is to be carried out with the aid of currently valid BMW repair instructions, schematic diagrams, maintenance manuals and working instructions in rational order with the specified tools (special tools) while paying particular attention to valid safety regulations.

In order to avoid unnecessary additional expenditure/costs, if any problems regarding installation, assembly or operation are encountered, after spending a little time on attempting to finding the problem (approx. 0.5 hour), an enquiry, including the vehicle identification number, part number of the installed retrofit kit and a detailed description of the problem, should be sent without delay to Technical Support via the Aftersales Assistance Portal (ASAP) .

Do not archive the printout of these Installation Instructions as daily updates are conducted through ASAP!

Refer to ASAP for explanations of the pictographs.

All illustrations show LHD vehicles. Carry out the same procedure analogously on RHD vehicles.

Pictographs:



identifies information that draws attention to danger/hazards.



identifies information that draws attention to specific requirements.

◀ identifies the end of an information or warning text.

Subject to technical modifications.

When installing cables/wires, particular care must be taken to ensure that they are not bent, kinked or damaged. The costs incurred will not be reimbursed by BMW AG.

Additionally installed cables/lines must be secured with cable ties.

Bridges, double crimp or parallel connections must be made if the specified PIN chambers are already occupied.

Installation information

The installation instructions describe the procedure on the left-hand side of the vehicle only. The same procedure should be followed analogously on the right-hand side of the vehicle.



The ride-height sensor is identical to the load sensor. ◀

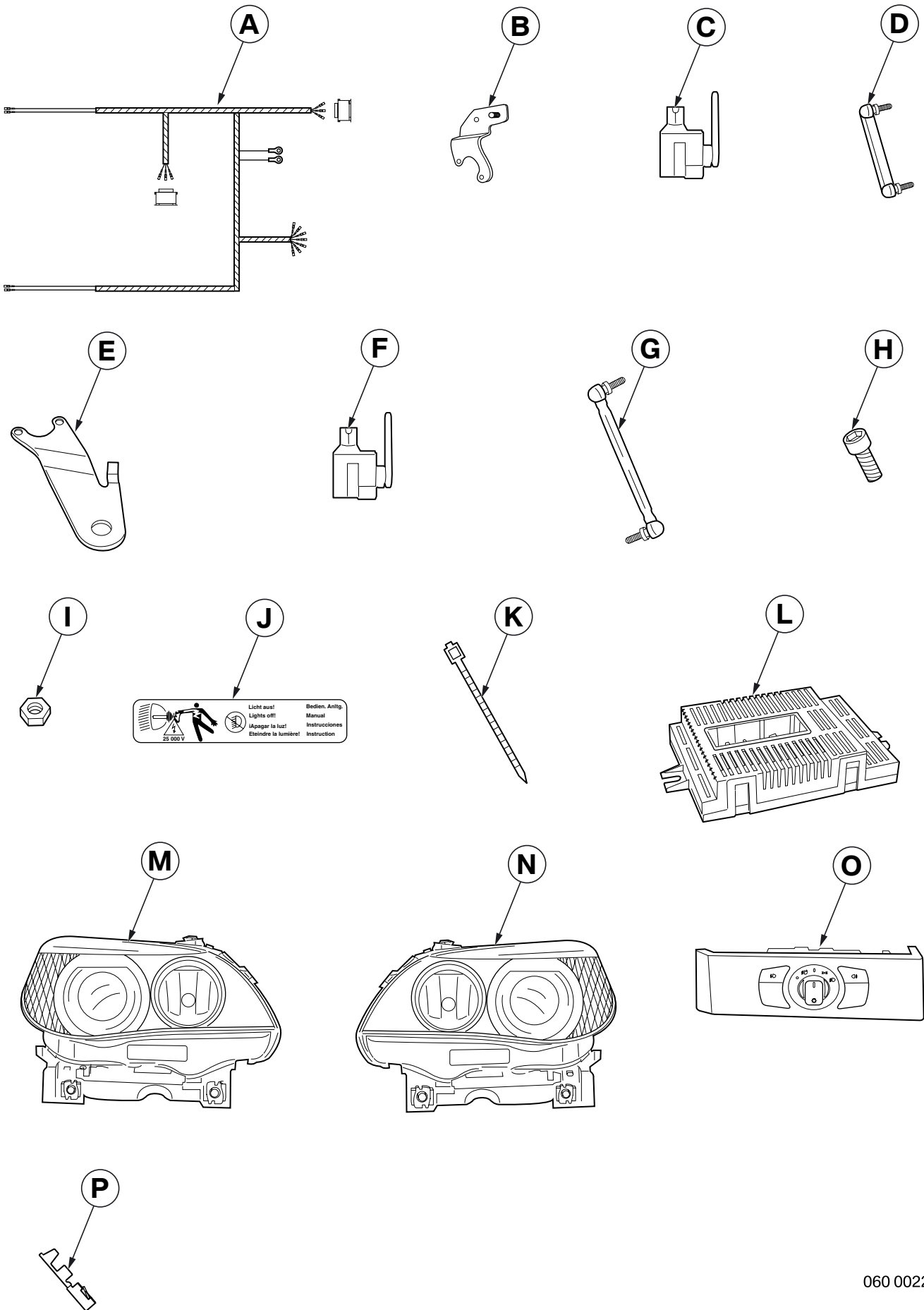
Required special tools

None

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1. Parts overview



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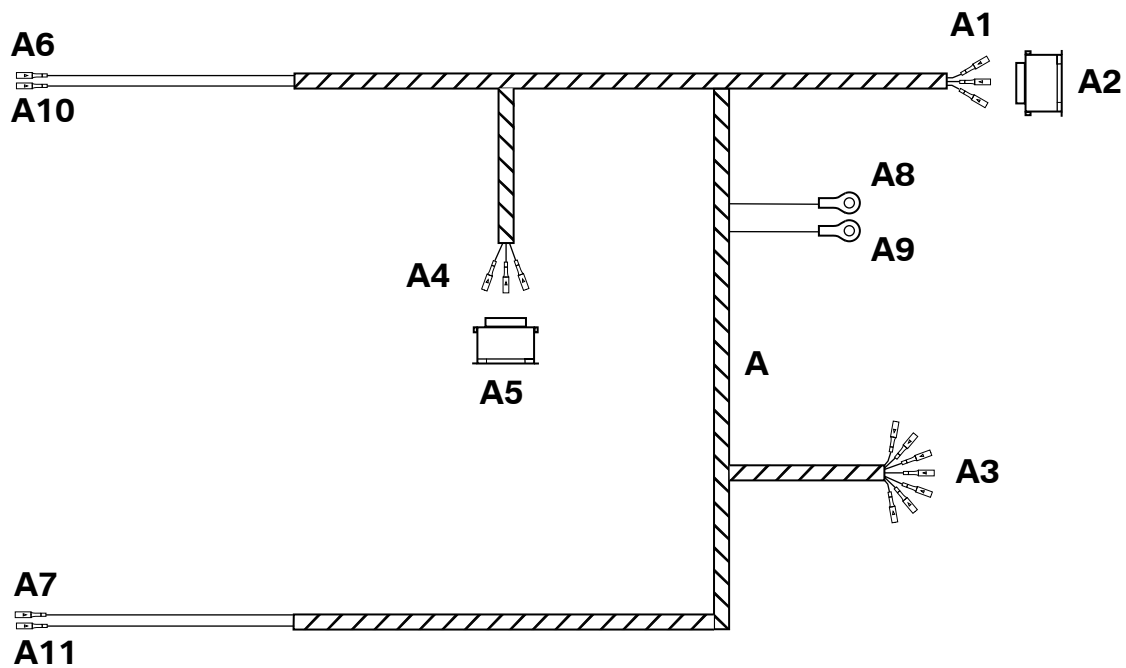
Key

- A Wiring loom A (1x)
- B Bracket for ride-height sensor (1x)
- C Ride-height sensor (1x)
- D Control rod, rear (1x)
- E Bracket for load sensor (1x)
- F Load sensor (component identical to ride-height sensor) (1x)
- G Angle joint, front (1x)
- H Hexagon socket head cap screw M5 x 10 (4x)
- I Self-locking hexagon nut M6 (5x)
- J Sticker (2x)
- K Cable tie (20x)
- L Lights module (1x)
- M Bi-xenon headlight, right (1x)
- N Bi-xenon headlight, left (1x)
- O Lights operating unit (1x)
- P Siemens socket contact (6x)

2. Preparatory work

	TIS No.
Perform quick test	---
Disconnect negative terminal of battery	12 00 ...
Remove the following components	
Front bumper trim panel	51 11 156
Left headlight	63 12 010
Right headlight	63 12 012
Left/right microfilter	64 31 010
Front right wheel arch trim	51 71 040
Rear right wheel arch trim	---
Footwell trim panel, right	51 54 181
Footwell trim panel, left	51 45 185
Glove compartment, right	51 16 366
Side trim panel on A-pillar in right footwell	51 43 075
Lights operating unit	61 31 037
Front right sill cover panel	51 47 000
Rear right sill cover panel	51 47 030
Rear bench seat	---
Additional bottom right cover on C-pillar	---
Bottom right cover on C-pillar	---
Luggage compartment - wheel arch trim panel, right	51 47 161
Removing and installing lights module	61 35 285
Installing bulb for xenon headlight	63 99 076
Installing ignition unit for xenon headlight	63 12 870
Installing control unit for xenon headlight	63 12 860

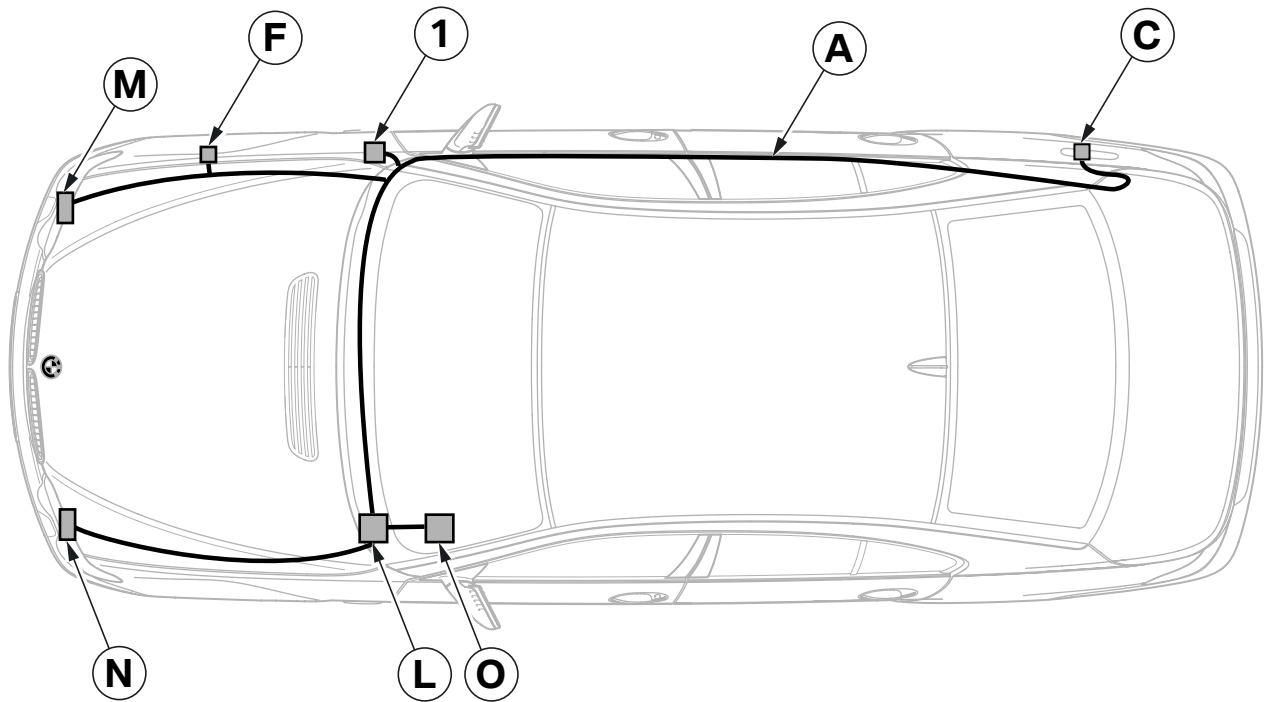
3. Overview of connections



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Item	Description	Signal	Wire colour / cross section	Connection location in vehicle	Designation/ plug-in location
A	Set of cables for xenon headlights				
A1	Socket contact		SW/WS SW/GN SW/GR 0.5 mm ²	At 6-pin black socket housing A2	PIN 1/4/5
A2	6-pin black socket housing			At rear right level sensor	X1451
A3	Socket contact		GR/WS, GR/GN, GR/BR, SW/WS, SW/GN, SW/GR BL 0.5 mm ²	At 76-pin connector of lights module	X12 PIN 7/27/ 46/48/54/55/ 66
A4	Socket contact		GR/WS, GR/GN, GR/BR 0.5 mm ²	At 6-pin black socket housing A5	PIN 1/4/5
A5	6-pin black socket housing			At load sensor, front right	X18032
A6	Socket contact		BL 0.5 mm ²	At right headlight	X13421 PIN 5
A7	Socket contact		BL 0.5 mm ²	At left headlight	X13420 PIN 5
A8	Cable lug 6 mm		BR 2.5 mm ²	At ground connector, right A-pillar	X13782
A9	Cable lug 6 mm		BR 2.5 mm ²	At ground connector, right A-pillar	X13782
A10	Socket contact		BR 2.5 mm ²	At right headlight	X13421 PIN 1
A11	Socket contact		BR 2.5 mm ²	At left headlight	X13420 PIN 1

4. Installation and layout diagram



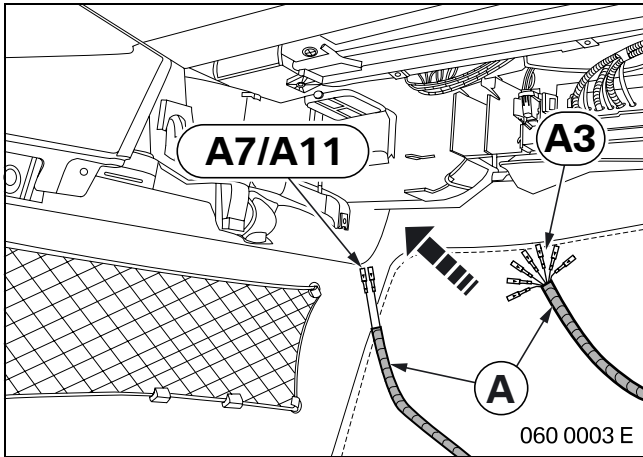
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Key

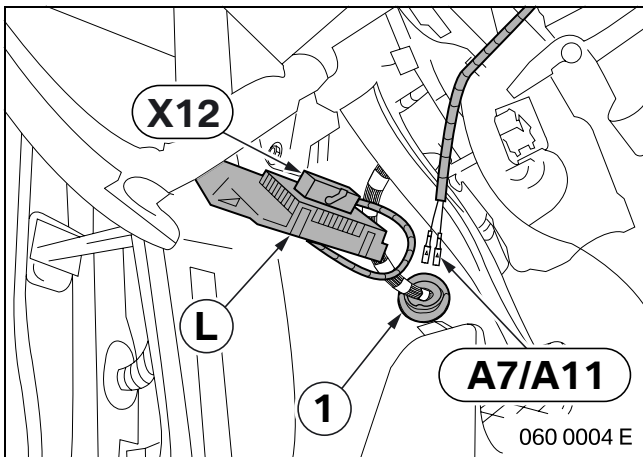
- A Bi-xenon wiring loom
- C Ride-height sensor
- F Load sensor
- L Lights module
- M Bi-xenon headlight, right
- N Bi-xenon headlight, left
- O Lights operating unit

- 1 X13782 Ground connector

5. Retrofitting bi-xenon headlight



Route branches **A3**, **A7** and **A11** of wiring loom **A** from front passenger's footwell behind heater/air conditioner to driver's footwell.

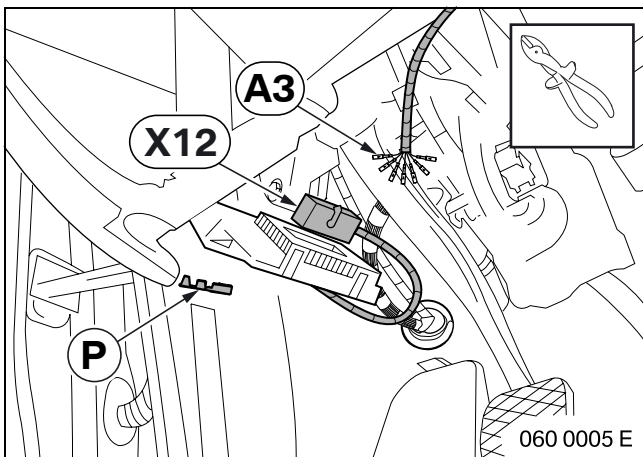


In driver's footwell, make opening in grommet (1) and pass branches **A7** and **A11** through grommet (1) into the engine compartment.

Install lights module **L**.


Disconnect 76-pin connector **X12** from lights module.

Unplug PIN 5 white/black and PIN 62 white/red from connector **X12**, insulate and tie back.

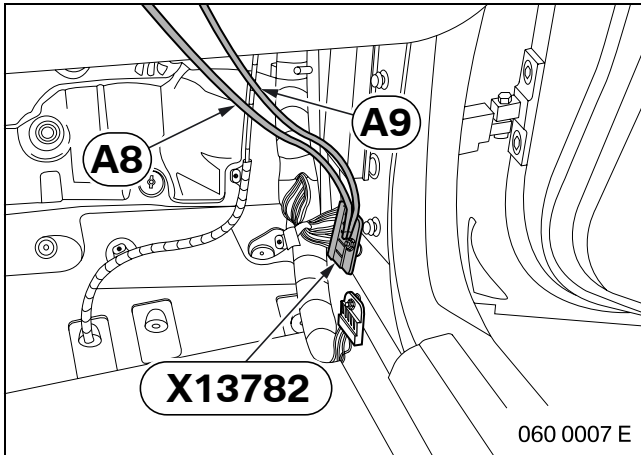


Cut off following AMP socket contacts of branch **A3**, replace by Siemens socket contacts **P** and plug in at socket contact **X12** as follows:

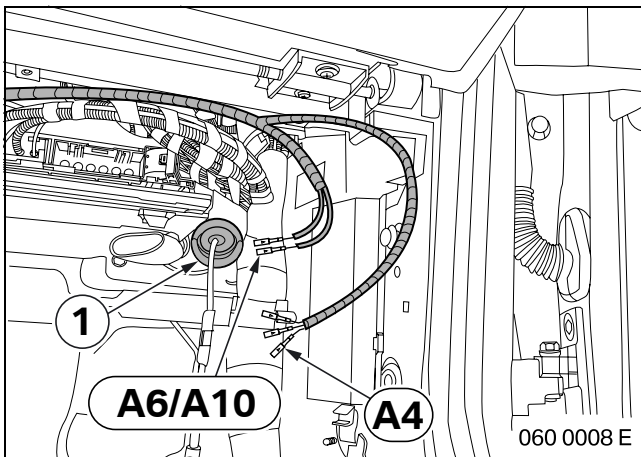
- A3** SW/GR at **X12** PIN 46
- A3** SW/GN at **X12** PIN 55
- A3** SW/WS at **X12** PIN 7
- A3** GR/WS at **X12** PIN 27
- A3** GR/GN at **X12** PIN 54
- A3** GR/BR at **X12** PIN 66
- A3** BL at **X12** PIN 48

 A Siemens socket contact is already fitted on **A3** BL. ◀

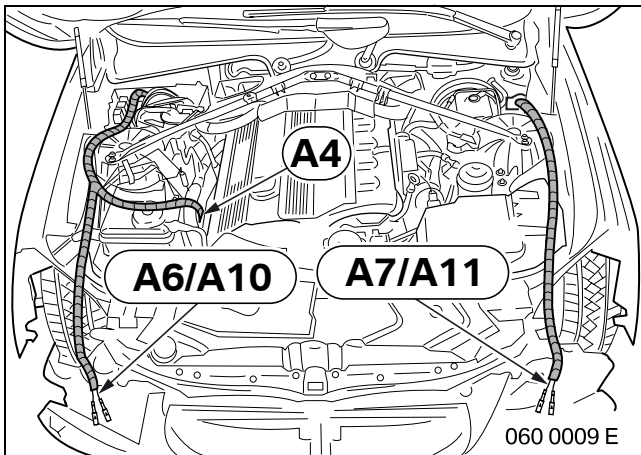
5. Retrofitting bi-xenon headlight



In the front passenger's footwell, connect branches **A8** and **A9** to ground connector **X13782**.

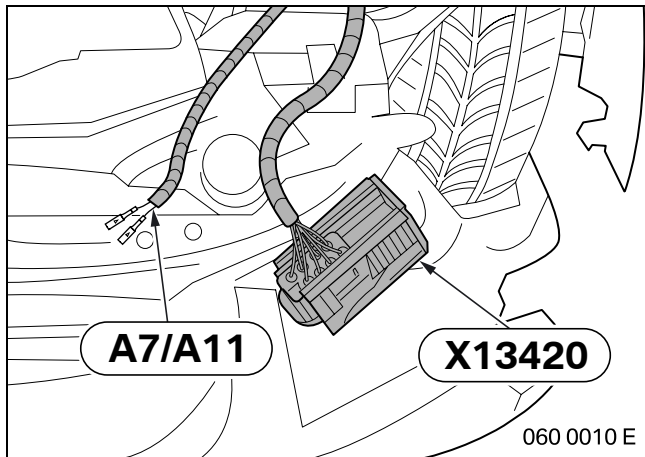


Pass branches **A4**, **A6** and **A10** through grommet (1) into the engine compartment.



In the engine compartment, run branches **A6** and **A10** to the right headlight as well as branches **A7** and **A11** to the left headlight.
Run branch **A4** into front right wheel arch.

5. Retrofitting bi-xenon headlight




Establish following pin connections at front left headlight:

Unplug PIN 5 white/red from **X13420**, insulate and tie back.

A7 blue at **X13420** PIN 5

A11 brown at **X13420** PIN 1

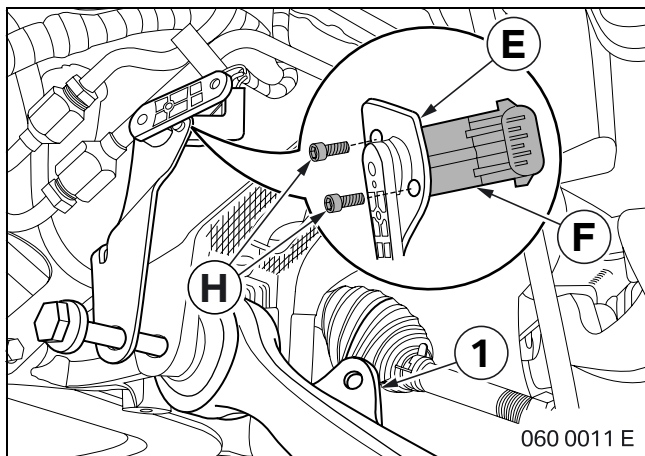
 Carry out same procedure on right-hand side.

Unplug PIN 5 white/black from **X13421**, insulate and tie back.


A6 blue at **X13421** PIN 5

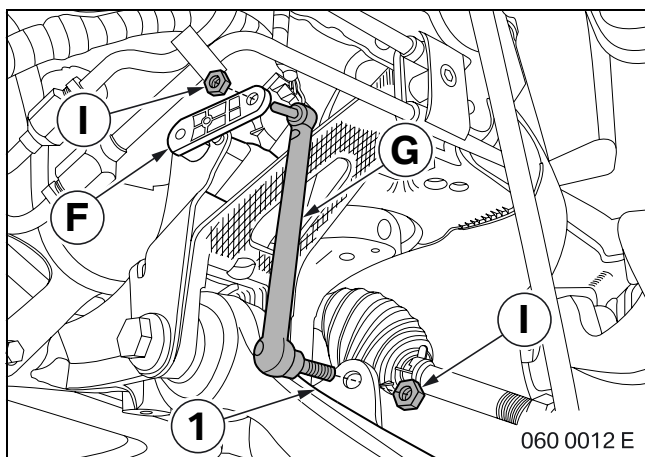
A10 brown at **X13421** PIN 1 ◀

Install bi-xenon headlights **M** and **N** (not illustrated)



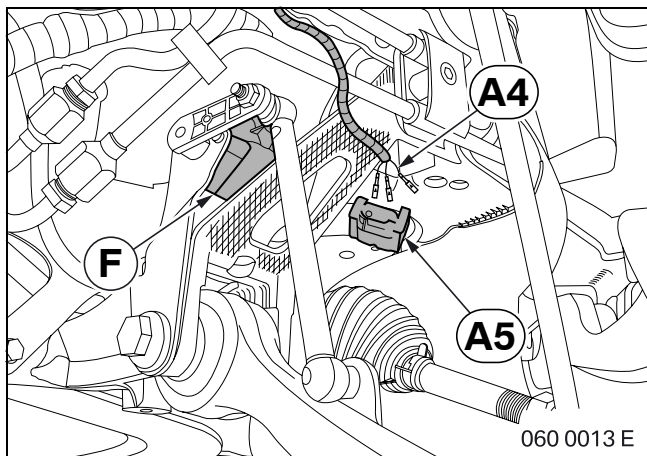
In front right wheel arch, secure load sensor **F** on bracket **E** with hexagon socket head cap screws **H** and screw down on control arm (1).

 Follow safety information on mounting the control arm (1) as described in TIS 31 12 001. ◀



Secure angle joint **G** with hexagon nuts **I** between load sensor **F** and control arm bracket (1).

5. Retrofitting bi-xenon headlight



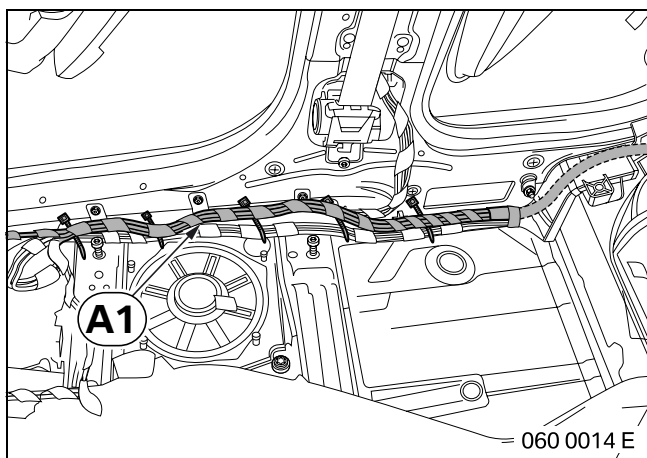
Plug in branch **A4** as follows at socket housing **A5**.

A4 GR/WS at **A5** PIN 1.

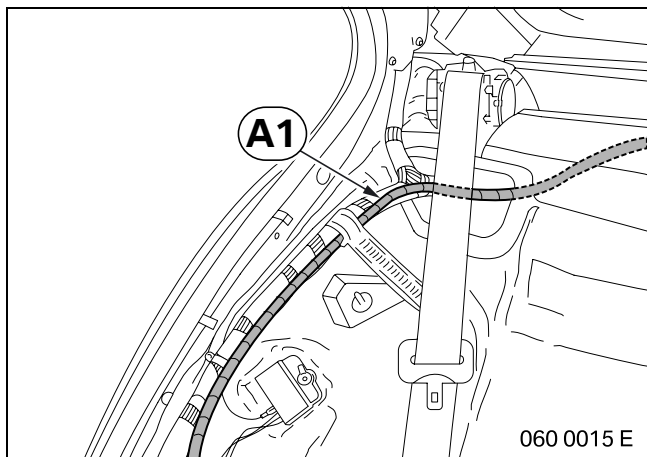
A4 GR/GN at **A5** PIN 4.

A4 GR/BR at **A5** PIN 5.

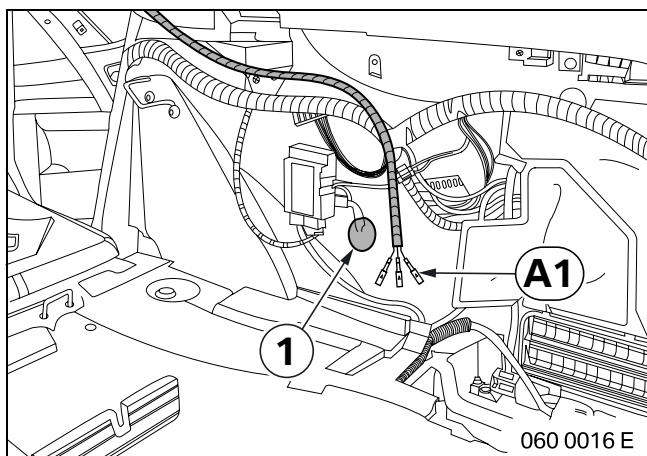
Connect socket housing **A5** to load sensor **F**.



Run branch **A1** along the passenger's side B-pillar on the vehicle wiring harness in the direction of the luggage compartment.

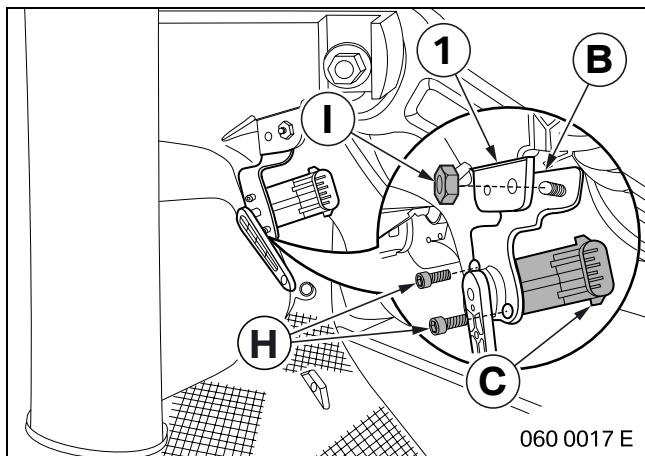


Run branch **A1** along the C-pillar into the luggage compartment.

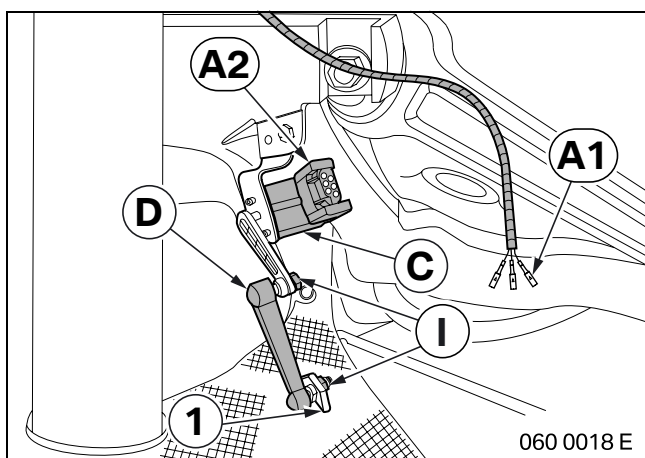


At rear right of luggage compartment, pass branch **A1** through grommet (1) into right wheel arch.

5. Retrofitting bi-xenon headlight



In rear right wheel arch, fit ride-height sensor **C** on bracket **B** with hexagon socket head screws **H** and secure on rear axle carrier (1) with hexagon nut **I**.



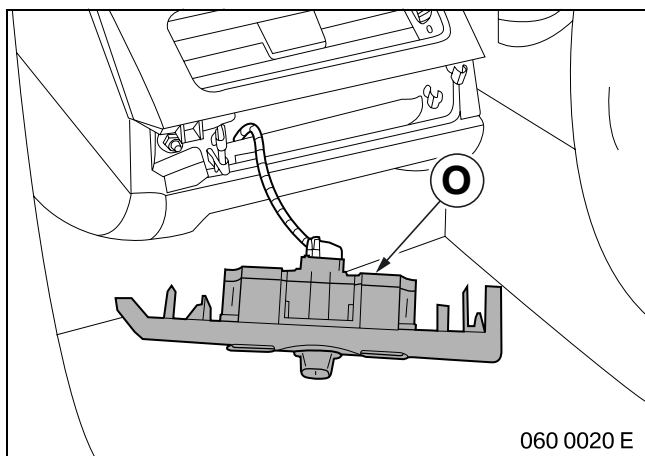
Secure rear control rod **D** with hexagon nuts **I** between ride-height sensor **C** and control arm bracket (1).

Plug in branch **A1** as follows at socket housing **A2**.

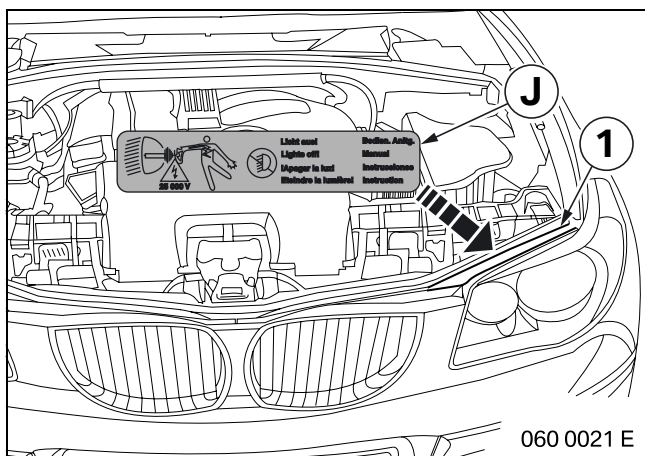
A1 SW/WS at **A2 PIN 1**

A1 SW/GN at **A2 PIN 4**

A1 SW/GR at **A2 PIN 5**



Install lights operating unit **O**.



Affix sticker **J** such that it can be read from the front on right and left front support (1).

6. Finishing off and encoding

- Connect battery. Connect battery charger.
- Program/encode retrofit with DISplus, MoDiC III or GT-1 with CIP application and follow the user prompt.



The vehicle order is adapted automatically.

- Perform quick test
- Perform function test
- Reassemble vehicle in reverse order of removal.
- Check setting of headlights in accordance with TIS PA 63 100 04

7. Circuit diagram

Key

A3	Lights module
B42	Load sensor
B69	Ride-height sensor
E7	Left headlight
E8	Right headlight
X12	White 76-pin connector at lights module
X1451	Black 6-pin socket housing at ride-height sensor
X13420	Black 8-pin socket housing at left headlight
X13421	Black 8-pin socket housing at right headlight
X13637	Ultrasonic welded connector
X13782	Cable lug Ø6 mm at ground connector
X18032	Black 6-pin socket housing at load sensor

Wire colours

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