



Parts and Accessories Installation Instructions

Xenon Light Retrofit with Automatic Headlight Adjustment Control BMW Z4 (E85)

Installation time

Approx. 5 hours, but this may vary depending on the condition of the car and the equipment in it.

Important information

Only for use in the BMW dealer organisation.

Ensure that the cables/lines are not kinked or damaged as you install them in the car.

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

Use cable ties when routing cables. Tie back any excess lengths.

Subject to technical modifications.

This retrofit system may only be operated in ECE countries in conjunction with a headlight cleaning system.

Before you install the retrofit system, test the control module status with the CIP (coding, customising, programming) test program. If the test detects incorrect statuses in one or more control modules, these must be updated first using the "Load software" function.

Target group

The target group for these installation instructions is specialist personnel trained on BMW cars with the appropriate specialist knowledge.

All work must be completed using the latest 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.

Retrofit kit No. 63 12 0 151 691

See EPC for other retrofit kit part numbers.

Special tools required

00 9 317 Trim wedge

00 9 321 Folding leg

00 9 323 Cleaning wedge

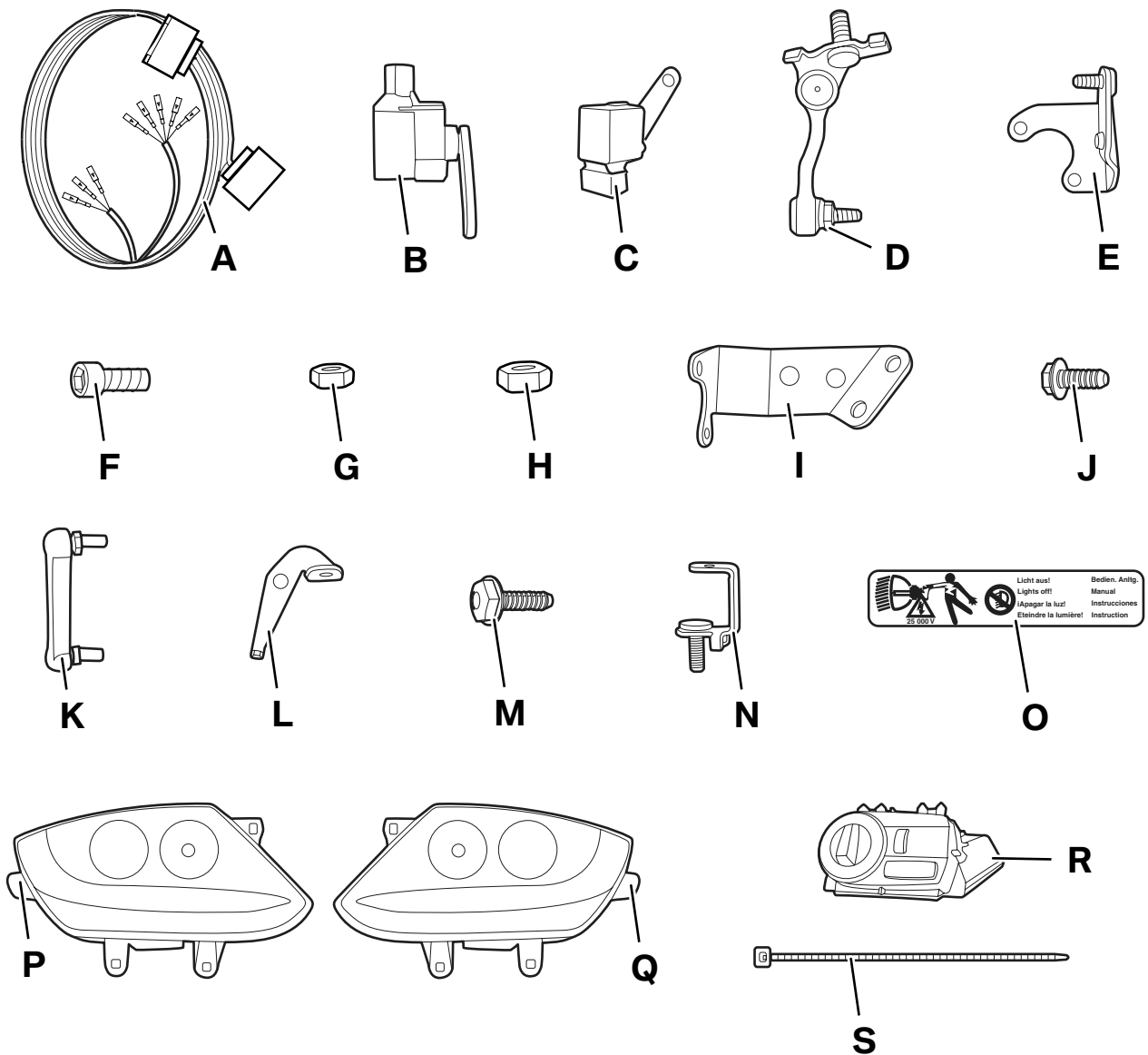
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1. Preparations

	TIS instruction No.
Conduct a brief test	
Disconnect the negative pole of the battery	12 00 ...
The following components must be removed first of all:	
Pedal trim	51 45 185
Side footwell trim on the left A pillar	51 43 070
Glove box with casing, right	51 16 367
Side footwell trim on the right A pillar	51 43 075
Side trim bottom part at rear right	51 43 010
Side trim top part at rear right	51 43 010
Right boot – wheel arch trim	51 47 161
Front bumper trim	51 11 156
Light module	61 31 033
Left headlight	63 12 001
Right headlight	63 12 ...
Wheel on the front right	
Wheel on the rear right	

2. Parts kit

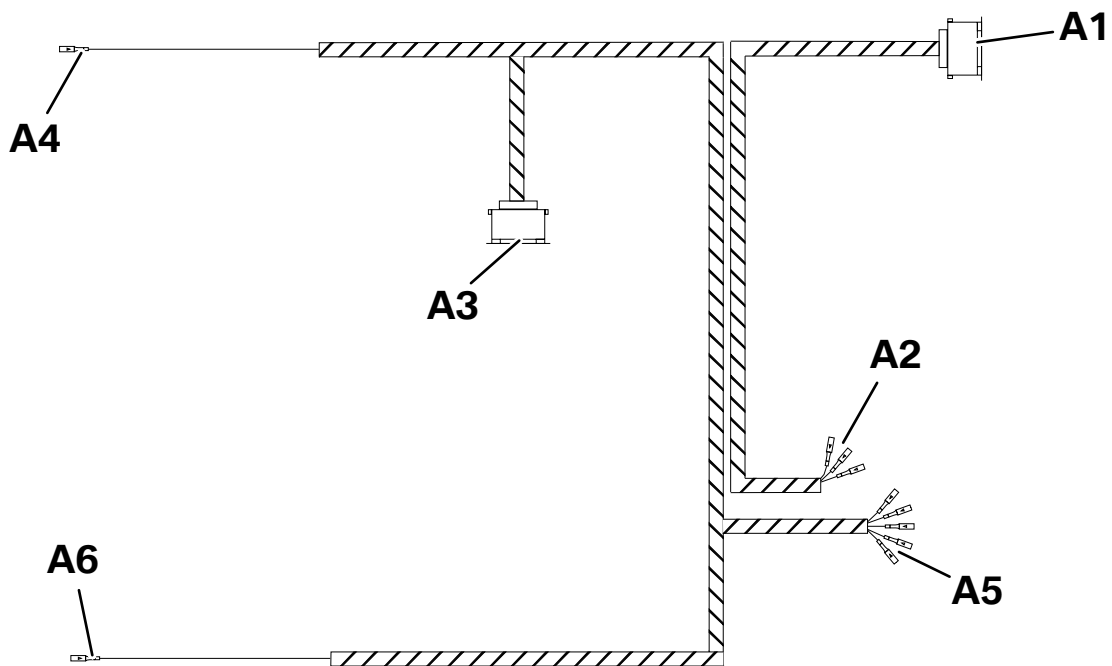


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Legend

- | | | | |
|---|--|---|---|
| A | Wiring harness (1x) | K | Control rod (1x) |
| B | Level sensor at rear right (1x) | L | Holder (1x) |
| C | Level sensor at front right (1x) | M | Hexagonal screw (1x) |
| D | Front angle joint (1x) | N | Extension (1x) |
| E | Holder, level sensor at front right (1x) | O | Xenon light sticker (2x) |
| F | Pan head screw M5x10 (4x) | P | Xenon headlight, right (1x) |
| G | Hexagonal lock nut M6 (6x) | Q | Xenon headlight, left (1x) |
| H | Hexagonal lock nut M8 (1x) | R | Light module (1x) (not included in kit) |
| I | Holder, level sensor at rear right (1x) | S | Cable tie (15x) |
| J | Hexagonal screw with washer M6x12 (2x) | | |

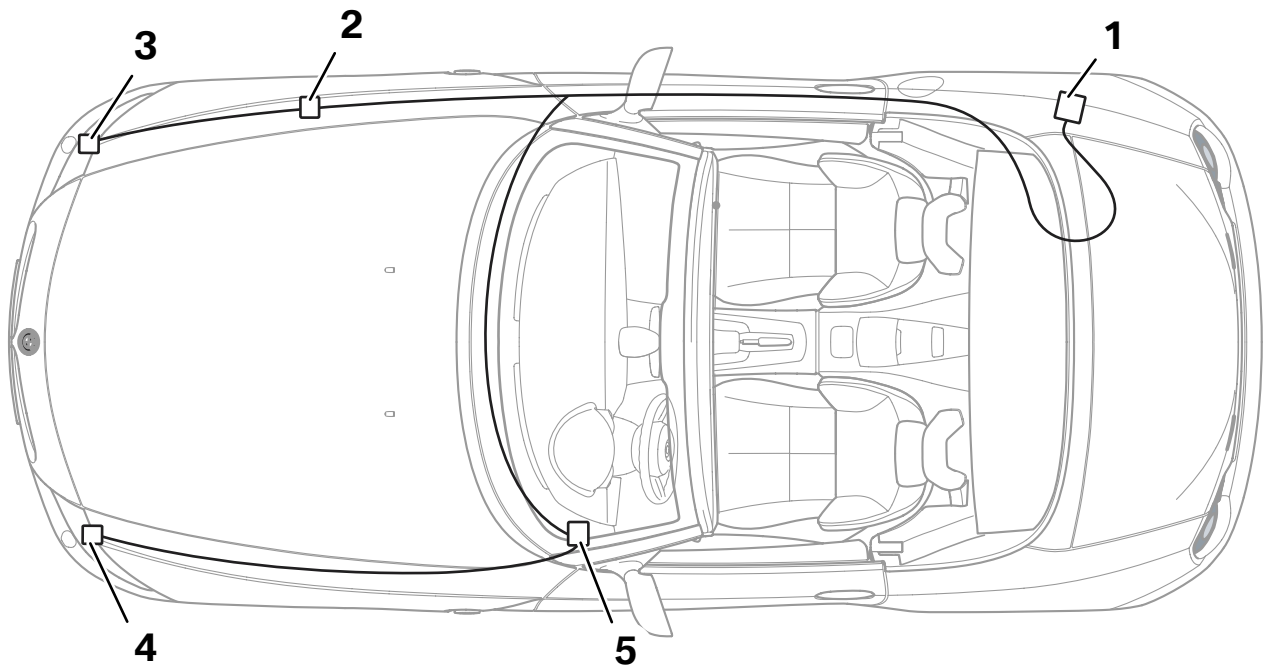
3. Connection overview



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Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A	Wiring harness	---	---	---	---
A1	Black 6-pin socket casing	---	SWG N/SWWS/ SWGR/ 0.5 mm ²	To level sensor B64 rear right	X13251 PIN 4/1/5
A2	Socket contacts	---	SWG N/SWWS/ SWGR/ 0.5 mm ²	To black 54-pin socket casing on light module A3	X12 PIN 14/46/26
A3	Black 6-pin socket casing		GRGN/GRWS/ GRBR/ 0.5 mm ²	To level sensor B42 front right	X18032 PIN 4/1/5
A4	Socket contact		SWBL/ 0.5 mm ²	To xenon headlight E148 front right	X19035 PIN 8
A5	Socket contacts	---	GRGN/GRWS/ GRBR/SWBL/SW/ 0.5 mm ²	To black 54-pin socket casing on light module A3	X12 PIN 22/19/23/2/36
A6	Socket contact	---	SW/ 0.5 mm ²	To xenon headlight E147 front left	X19034 PIN 8

4. Installation and cabling diagram



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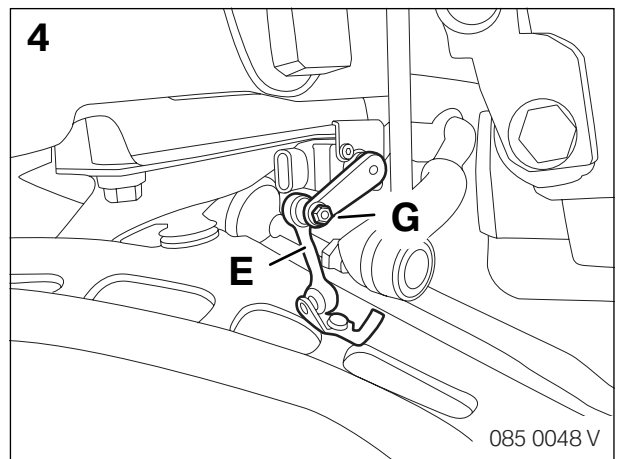
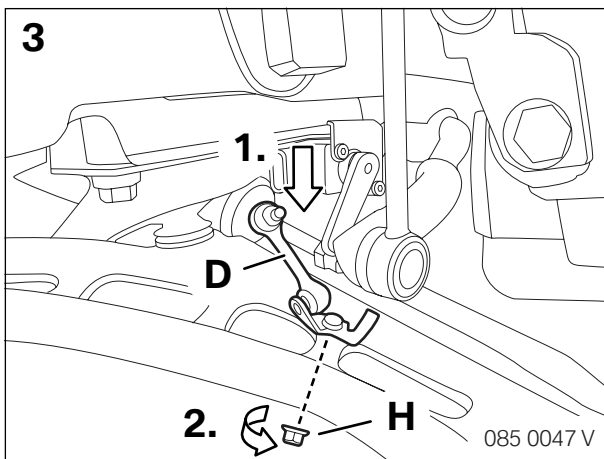
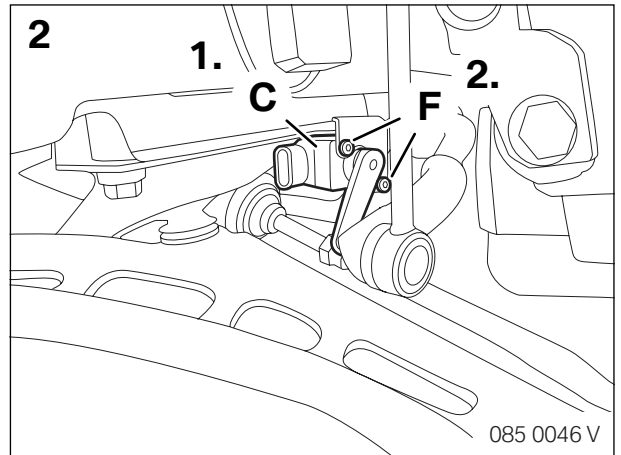
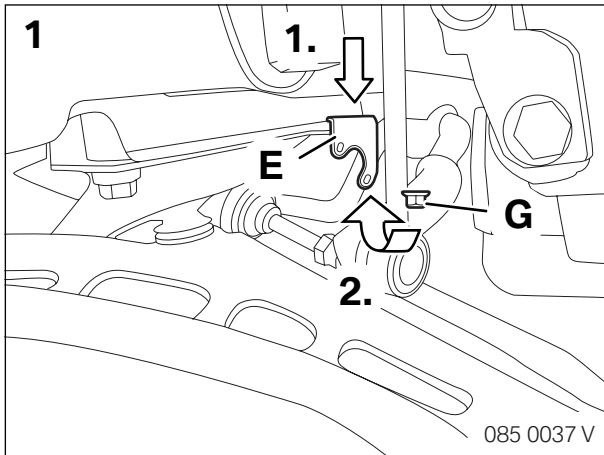
Legend

- 1 Level sensor rear right
- 2 Level sensor front right
- 3 Xenon headlight, right
- 4 Xenon headlight, left
- 5 Light module

5. To install the front right level sensor



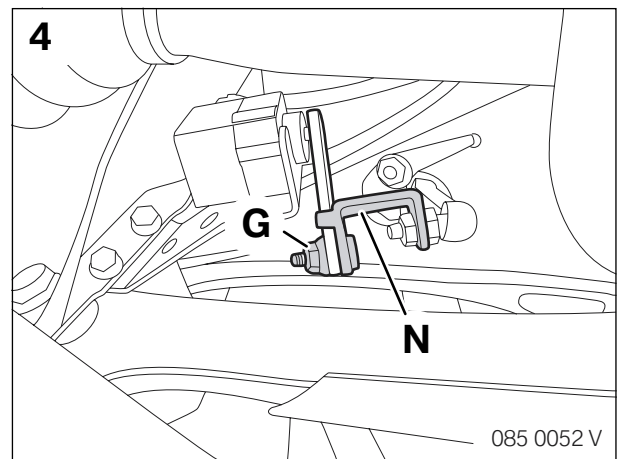
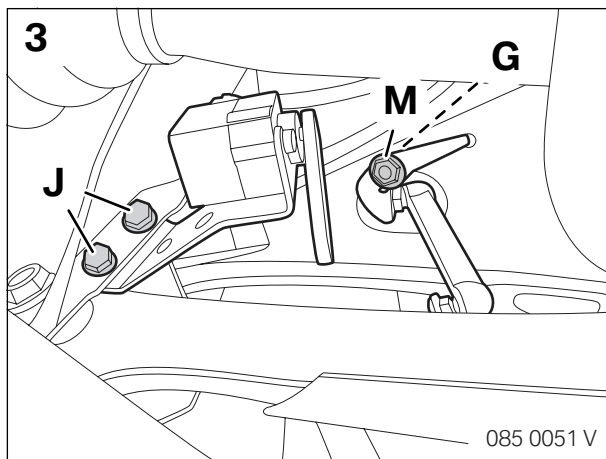
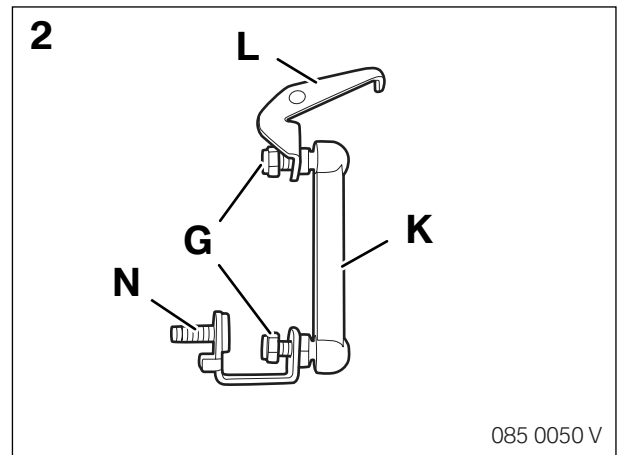
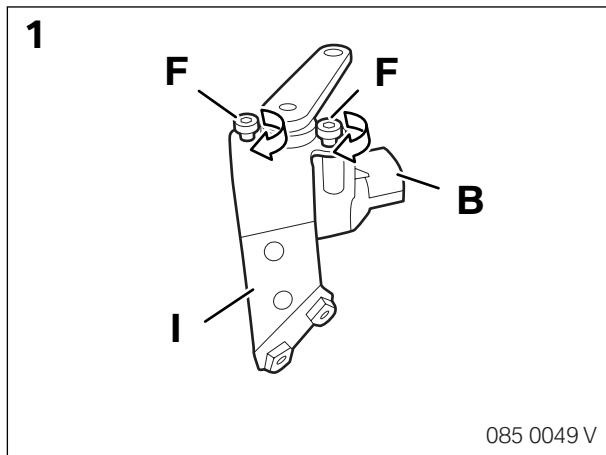
Install as shown in the following illustrations. Tighten all screw connections. ◀



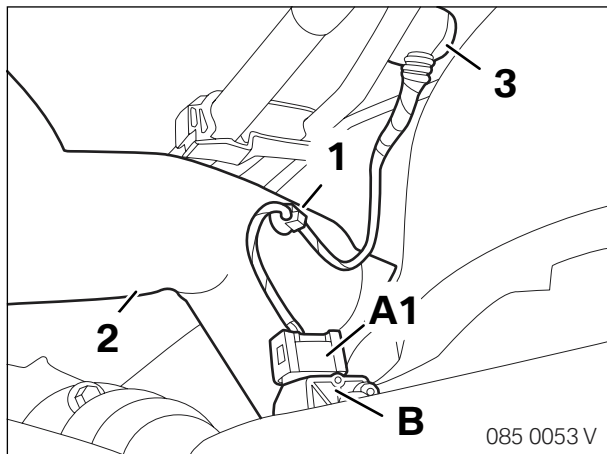
6. To install the rear right level sensor



Install as shown in the following illustrations. Tighten all screw connections. ◀



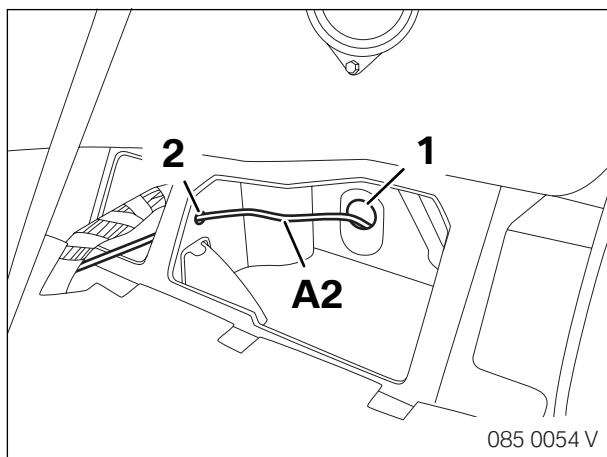
7. To install the wiring harness



Connect branch **A1** to rear right level sensor **B**.

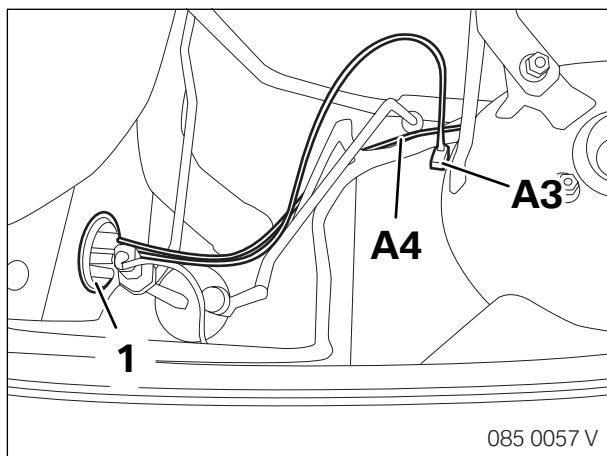
Insert cable holder (1) into the hole in top transverse control arm (2).

Insert grommet (3) into the boot floor and route the wiring harness into the boot.



Route branch **A2** from the boot through opening (1) and hole (2) into the interior.

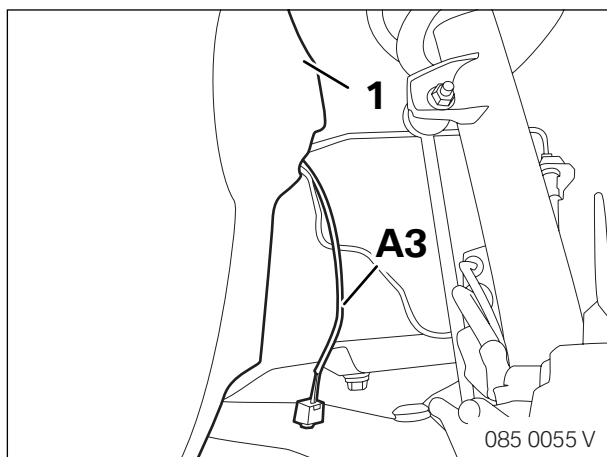
Then route branch **A2** into the driver's footwell.



Route branch **A4** along the standard wiring harness in the engine compartment on the right to the right headlight.

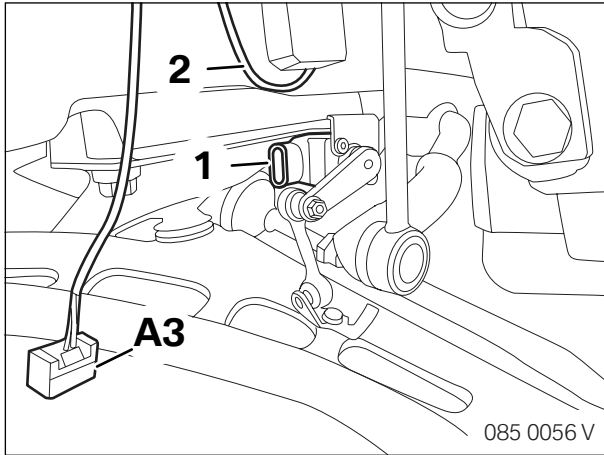
Route branches **A5** and **A6** through grommet (1) into the interior.

Then route branch **A3** into the front right wheel arch.



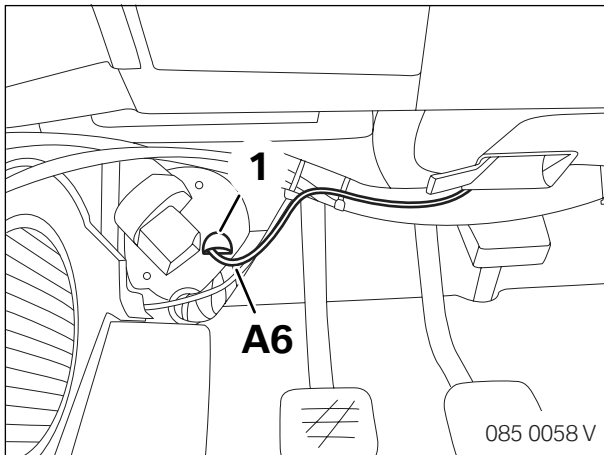
Route branch **A3** from the engine compartment behind plastic lining (1) along the brake line into the front right wheel arch.

7. To install the wiring harness



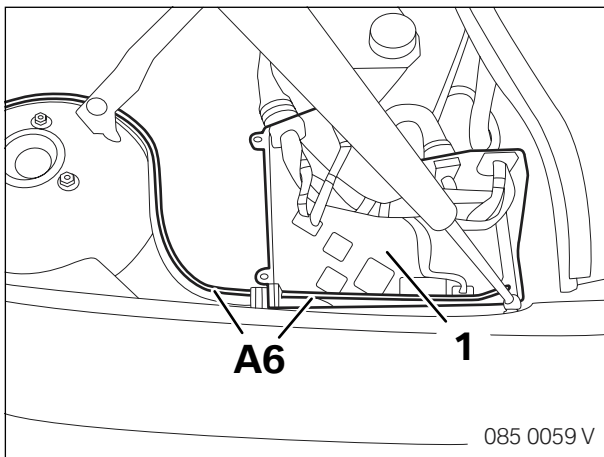
Connect branch **A3** to plug (1) of the front right level sensor.

Attach to existing cables (2) with cable ties.

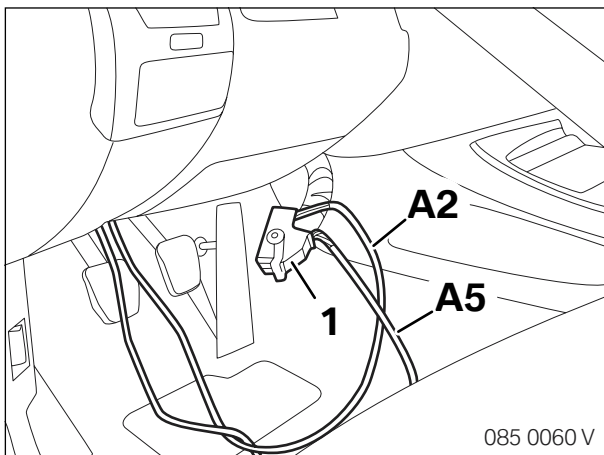


Route branches **A5** and **A6** into the driver's footwell. Then route branch **A5** together with branch **A2** to the light module. ◀

Route branch **A6** through opening (1) in the plastic lining and forwards into the engine compartment.



Route branch **A6** through electric box (1) and further along the standard wiring harness in the engine compartment on the left to the left headlight.



Connect branches **A2** and **A5** into black 54-pin socket casing X12 (1) of the light module as follows:

- SWG N to PIN 14
- SWWS to PIN 46
- SWGR to PIN 26
- GRGN to PIN 22
- GRWS to PIN 19
- GRBR to PIN 23
- SWBL to PIN 2
- SW to PIN 36

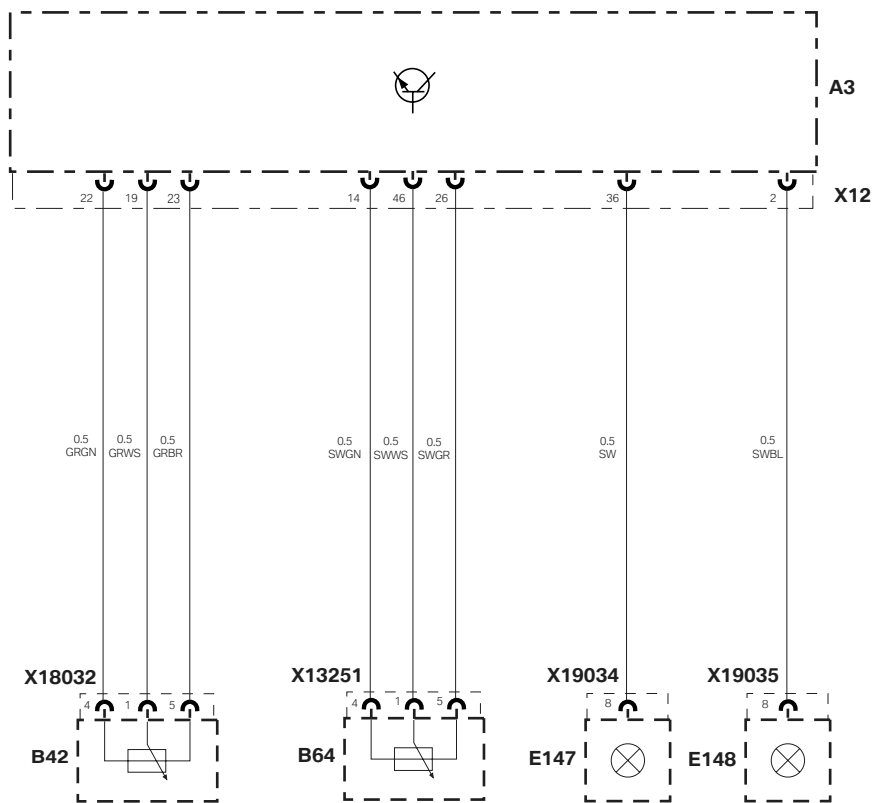
8. Concluding work and coding



The xenon light retrofit with automatic headlight adjustment control requires coding. ◀

- Connect the battery, connect a charger
- Program/code the parking distance control (PDC) retrofit with DISPlus or GT-1 using the CIP application and follow the instructions in the program
- Conduct a function test
- Re-assemble the car
- Stick the xenon light stickers onto the xenon headlights where they are clearly visible

9. Circuit diagram



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9. Circuit diagram

Legend

A3	Light module
B42	Level sensor front right
B64	Level sensor rear right
E147	Xenon headlight, left
E148	Xenon headlight, right
X12	Black 54-pin socket casing on light module
X13251	Black 6-pin socket casing on level sensor, rear right
X18032	Black 6-pin socket casing on level sensor, front right
X19034	Black 8-pin socket casing on xenon headlight, left
X19035	Black 8-pin socket casing on xenon headlight, right

Cable colours

GR	grey
GN	green
WS	white
BR	brown
SW	black
BL	blue